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# FINANCIAL TIMES

The welfare state

Under threat from cost cutters everywhere

Andrew Adonis, Page 10



Greece's new regime

More flexible towards Turkey

Seeing off the speculators



**Today's surveys** FT-IT Review

Foreign Exchange

## **Crédit Lyonnals** aims to securitise FFr40bn of loans

Crédit Lyonnais, the state-owned French bank, is to amounce details of a FFr40hn (\$7.69hn) securitisation issue designed to increase its financial flexibility at a time when it is facing the prospect of substantial losses. The issue will be the largest securitisation carried out on the French market and represents an ambitious expansion in the use of the

US call for regulation reform: Congress should give US regulators power to oversee foreign markets such as the London Metal Exchange, said the New York Mercantile Exchange, the LME's rival. The LME said the proposal, in the wake of the Sumitomo copper affair, was "unsurprising". Copper broker suspends staff, Page 4

Japan to allocate \$155bn to science: Japan is to allocate Y17,000hn (\$155bn) to science and technology over the next five years, in an attempt to overcome the reputation of its people as great developers of other people's ideas but poor innovators. Page 12; Money thrown at research, Page 5

Blow to EU fishing industry: The European Union's fishing industry suffered a heavy blow when the European Commission halved this year's quotas for herring fishing in the North Sea to avoid a collapse of the stock. Page 2

Cuban hotels deal agreed: A Canadian entrepreneur is undertaking s \$400m joint venture to build 11 tourist hotels in Cuba in the island's biggest foreign investment deal since the US intro-duced measures in March to discourage foreign business, Page 12

US appeal over internet indecency: The US Justice Department has formally appealed to the Supreme that over a decision by a special federal court panel in Philadelphia that blocked a new law against distribution to minors of indecent material over computer networks.

Boeing moves into executive lets: Boeing and General Electric, both of the US, launched's joint venture to build executive jets. Page 13

Profit expected at Lloyd's: Lloyd's of London will next week mark the end of five lossmaking years at the insurance market by reporting a £1.18bn (\$1.8bn) profit for the 1993 account, according to estimates. Page 7

israel budget cuts agreed: Israel's government approved sweeping budget cuts, without agreeing on which areas to target. Page 4

That bank governor quits: Vijit Supinit, the governor of Thailand's central bank, has resigned following sharp public criticism of his role in a series of financial scandals. Page 12; Fall from

Further arrest in Arizona 'bomb plot': US federal authorities announced another arrest, making the total 12, in the alleged paramilitary plot to bomb government buildings in Arizona. Page 6

Secul targets trade deficit: South Korea's president Kim Young-sam called for a halt to overseas holidays and consumer spending on imported luxury products in an effort to cut the country's trade deficit. Page 5

SmithKline Beecham, the UK drugs company, is to be paid \$100m over the next five years by two other drugs companies for a genetic database it built with its US partner. Page 13

Baring Asset Management, one of the biggest foreign investors in South African shares, is consid-ering suspending share dealing through South Africa-based Nedcor Securities. Page 13

Victnam's Communist party is to change its foreign investment law in October but opportunities for foreigners could diminish. Page 4; Editorial Comment, Page 11

Claus reappointed as Czech PM: Václav Klaus was reappointed prime minister of the Czech Republic and submitted a list of proposed cabinet members to president Václav Havel. Page 3

UK upbeat about Saudi relations: UK foreign minister Malcolm Rifkind had talks in Saudi Arabia and said trade relations had not been affected by the presence of Saudi dissident Mohammed al Massaari in Britain. Page 4

Wimbledon: Top men's seed Pete Sampras will play his quarter-final against Richard Krajicek of the Netherlands who yesterday defeated Germany's Michael Stich, the tenth seed. In the women's event, Germany's Steffi Graf overwhelmed former finalist Jana Novotna and now faces Japan's Kimiko Date. in the semi-finals. The other semi is between fourth-seeded Arantza Sanchez Vicario and Meredith McGrath of the US.

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O THE FINANCIAL TIMES LIMITED 1996 No 33,025

Radical restructuring designed to cut operating costs by \$551m a year

**WEDNESDAY JULY 3 1996** 

# Big shake-up at Credit Suisse

By William Hall in Zurich and Nick Denton in London

CS Holding, one of the world's largest financial services groups, has unveiled a radical restructur-ing plan aimed at improving its lacklustre earnings in recent

years.

The group, which is based on the Credit Suisse commercial bank in Switzerland and the CS First Boston investment bank in New York and London, said its operations would be concentrated into four core businesses cutting 5,000 jobs - the divestment of industrial activities and an extraordinary charge of SFrilm (\$800m). The group hopes to savs about SFr700m in annual operat-

Mr Rainer Gut, CS chairman, said the restructuring would change the group from a "Swiss bank with international activities to an international financial institution with headquarters and certain core businesses in Switzerland\*

Mr Lukas Mühlemann, chief executive of Swiss Reinsurance, has been appointed group chief executive. Mr Josef Ackermann has resigned as chief executive of the Credit Suisse bank because of "differing views", the group said. CS Holding shares, which have trailed the Swiss market for much of this year, jumped SFr14.5 to SFr134.5 and led the

SMI index of leading Swiss shares to a record high. However, the two leading international credit rating agencies, Moody's Investors Service and Standard & Poor's, put Credit Suisse on credit watch, indicating that a reduction of its ratings was being considered.

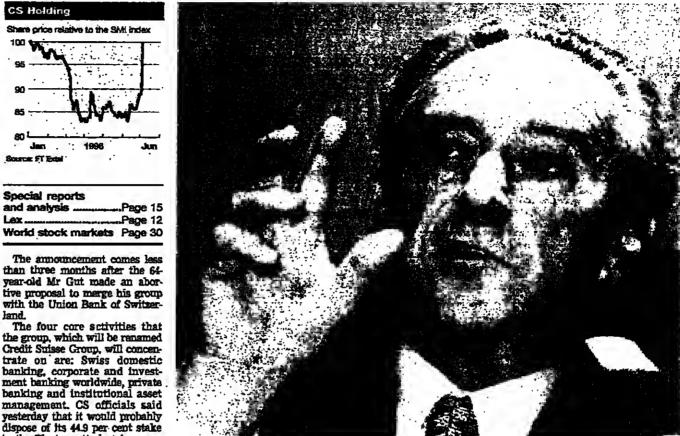
Share price relative to the SMI index

and analysis . Page 15 ..Page 12

than three months after the 64year-old Mr Gut made an abortive proposal to merge his group with the Union Bank of Switzer-

The four core sctivities that the group, which will be renamed Credit Suisse Group, will concen-trate on are: Swiss domestic banking, corporate and investment banking worldwide, private banking and institutional asset management. CS officials said yesterday that it would probably dispose of its 44.9 per cent stake in the Electrowatt electric power generation and industrial con-

trols subsidiary. Credit Suisse has been slower than its Swiss rivals to cut back its unprofitable domestic retail division, and most of the SFrlbn provision will cover this. Swiss retail banking, which operates under three brand names, will be three years, largely through nor-consolidated under the Credit mal staff turnover. By eliminat-



Rainer Gut: vision of restructured group as an international financial institution

worldwide will be made in the Swiss retail network.

The group expects the job cuts to take place over the next two to

Suisse Volksbank name and ing overlapping bank branches about 3,500 of the 5,000 job cuts CS expects to cut its Swiss network from 376 outlets to about

The international investment banking business of CS First Bos-ton would be merged with the

Credit Suisse First Boston would have an equity capital of about \$8.5bn and rank as the largest corporate and investment

Swiss investment business of Credit Suisse. The enlarged sure resellers' sales."

Continued on Page 12

# Russian security chief urges visa clampdown

By John Thomhill and Chrystia Freeland in Moscov

Lebed takes up fight for Yeltsin on eve of poll

Mr Alexander Lebed, Russia's economy and improve the social for foreigners, has emerged as newly-appointed national secunewly-appointed national security chief, yesterday seized the political centre stage on the eve of presidential elections by calling for tougher visa requirements for foreigners and s fresh crackdown on government corruption.

The speech was part of President Boris Yeltsin's attempt to highlight his nationalist credentials and fight off the challenge of communist rival, Mr Gennady Zyuganov, in todsy's decisive presidential poll.

For the first time in Russia's

history, its 108m registered vot-ers will elect a Kremlin leader after s fierce contest in which Mr Yeltsin has promised to pursue economic reform while Mr Zyuganov has pledged to strengthen government control over the

Mr Yeltsin, whose re-election prospects have been clouded by illness and an abrupt disappear-ance from public campaigning, was reported to be working from his country dacha.

The announcement of Mr Lebed's tough law-and-order pro-gramme was designed to emphasise the prominent role he would play in a future Yeltsin administration. Mr Yeltsin brought the former paratrooper into his administration after Mr Lebed won 15 per cent of the vote in the

first round of the elections.

Mr Lebed, who outlined plans to overhaul the armed forces, crackdown on crime and corrup-tion, and secure Russia's borders by tightening visa requirements

and psychological concerns.

Mr Zyuganov, who trailed the

campaigners.

But Mr Lebed's aggressive nationalist rhetoric and obvious ambition have already earned him public reprobation from some of Russia's senior leaders and western governments.

He tried to counter those objections yesterday admitting: "There have been a lot of rumours about enormous additional powers that I have sliegedly wanted to assume - Lebed is striving for demands, Lebed is a monster."

He insisted that these accusations were not true, but undermined his defence by broadening the traditional definition of national security to include economic, ecological and even moral

president by 3 percentage points in the first round of voting, also adopted s low profile yesterday, withdrawing from s press confer-ence for fear of breaking the electoral law which prevented cam-paigning the day before the poll. But be still sppears confident he can steal victory if Mr Yelt-sin's unenthusiastic constituency

fail to make it to the polls today

and wavering voters baulk at electing an ailing 65-year-old man who has suffered two heart attacks in the past year.

Analysts believe voter turn-out could be the decisive factor in today's ballot, predicting a com-fortable Yeltsin victory if more than 60 per cent of electors make it to the polls, but warning that the president's career could be in jeopardy if fewer Russians muster the energy for a second vote.

Power brokers at the bedside Observer, Page 11

# **Digital** to shed 7,000 jobs in \$475m overhaul

By Louise Kehoe in San Francisco

Digital Equipment, the world's largest computer company after International Business Machines, is to cut 7,000 jobs and take a \$475m restructuring charge.

The moves are part of an attempt to deal with unexpected problems in its personal computer business and weakness in the performance of its European subsidiaries.

Digital's problems bighlight the recent downturn in the per-sonal computer industry in the US and some parts of Europe,

particularly Germany. Mr Robert Palmer, Digital chairman and chief executive, said earnings for the fiscal fourth quarter would be "well below expectations," and revenues would be below those of the same

period a year ago.

The anticipated shortfall is a serious setback for the company, which had appeared to be making a recovery after heavy losses. Between 1990 and 1994 Digital recorded cumulative losses of more than \$5bn, but the company returned to profitability in late 1994 and has reported six consecutive quarters of strengthening

"This is a setback," Mr Palmer acknowledged. "We haven't managed our PC business very well st all. We did not accurately mea-

A number of other leading PC manufacturers, including Apple Computer and Packard Bell of the US, and Olivetti of Italy, have been struggling to come to terms with problems in the PC market. ment restructuring and reported big losses; Packard Bell has merged its PC operations with those Groupe Bull of France and Japan's NEC; and Olivetti has been struggling to return its loss-making PC business to profit.

When PC prices dropped sharply, earlier this year, Digital, like most other manufacturers, was forced to give rebates to dealers on their excess stocks. However, Mr Palmer insisted Digital's turnsround remained

# MasterCard steps up credit battle with US curb on rivals

By Motoko Rich in London

MasterCard International has intensified the global battle between credit card issuers by restricting its member banks in the US from issuing rival cards such as American Express or Dean Witter Discover.

Following a meeting of Master-Card's global board of directors in London over the weekend, the US board, consisting of 24 repre-sentatives from its member banks, decided that "members that choose to issue competing card programmes may not participate in MasterCard within the

The policy move, which follows last month's announcement by American Express of an international expansion programme, aligns MasterCard with Visa, a rival payment card organisation. Visa has a by-law in the US banning member banks from issuing all rival cards except MasterCard, and MasterCard's policy would Until now, American Express investigating.

American News ..... World Trade News .

has issued its own cards through a proprietary distribution channel. However, earlier this year it. said it wanted to issus cards through banks. It has established distribution deals with banks in Brazil, Greece, Israel, Turkey, Portugal, Venezuela, South Korea and South Africa.

Visa tried to restrict its Euro-pean member banks from issuing rival cards, but decided to drop the plans after Mr Karel Van Miert, European competition commissioner, warned that it could not accept such a move. MasterCard, which has 13,300 members in the US, said yester-

day it had decided "support for the MasterCard brand would be diminished if its members participated in competing programmes such as American Express". The US Department of Justice said it would be "looking at competitive issues involving the prohibition of certain joint ventures in the credit card market", although it declined to say which

companies or brands it was

American Express, said: "I think this move by MasterCard is frankly arrogant. It looks like MasterCard's reaction to our new strategy." He said American Express had

already been approached by 50 US banks interested in issuing the cards. "Ws would like every bank to have the right of choice and we think this move is downright anti-competitive."
In the US, Visa commands 49.9

per cent of the credit card market while MasterCard bolds 27.1 per cent and American Express, 15.4 per cent. Last year Visa beld 54 per cent of the global credit card market in terms of transaction volumes. Mastercard had 31 per cent and American Express 10

Mr Mark van Wsue, secretarygeneral of Europay International a payment card membership organisation which runs the MasterCard brand in Europe, said: "We have said from the beginning that we do not intend to impose such a ban in Europe."

#### CONTENTS Int. Band Service Maraged Funds \_\_\_\_\_21-22 Money Madres \_\_\_\_\_19 E FT-IT Review PACETE SOLES .. FT Actuation \_\_\_\_\_\_\_26 FT/SP-A WAI Indices \_\_\_\_\_30 E Foreign Statemen Landon 🚝

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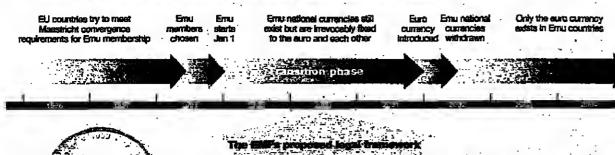
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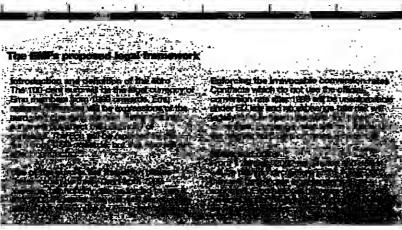
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European economic and monetary union: timetable for change





EU lawyers to discuss how to beat speculators on road to single currency

# Quest for an Emu without tears

s the markets mull the optionk for European monetary union, a group of law officials will gather in Brussels today for a secretive

Representatives from the European Commission, European Monetary Institute and European Union governments will be working out details of the legal framework for Emu.

With the EMI and Commission having both recently produced draft legal frameworks, many of the key issues have been decided. However, one small detail could generate some strong debate today - the question of how far the law can be used to fight currency speculation in the transition phase in which national currencies and the euro co-exist.

The EMI has proposed that contracts which do not respect the official exchange rates should be unenforceable under EU law. It believes this is necessary to make Emu more credible. However, the European Commission which is ultimately responsible for creating the new legislation - wants to take a slightly softer line.

The debate over the legal language

highlights a broader fear about whether currency turmoil could threaten Emu and whether policy makers can do any-

thing to combat it.
As one banker who has recently been in discussion with the Commission about the issue says: "The fear of market speculation has become a real ssion. The Commission and EMI are casting around for things to fight

By Michael Lindernann in Bonn

German industrialists have

displayed their pobtical muscle

by trying to thwart Bonn's

attempt to settle a row with

the US over public sector con-

tracts. The Federation of Ger-

man Industry (BDI) opposes

the courts if they are unhappy

about the way contracts are

awarded. The US wants Ameri-

can companies to be able to

appeal over such contracts.

The BDI said it was deter-

mined to ensure that compa-

nies which bad misgivings

about the way contracts for

power stations and other larger

state projects were awarded

should not be allowed to go to

court, where decisions took too

long and held up the tendering

The row centres on com-

plaints by Washington that

General Electric and Westing-

bouse were treated unfairly in

their unsuccessful bids for

nower stations in eastern Ger-

many. The US has demanded

that Germany introduce legis-

lation to allow recourse to the

The BDI used its influence to

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courts in such cases.

GERMANY:

Just bow far this fear is justified is an issue of considerable debate in the markets. On the one hand, the currency markets have been calm in recent months. And with some market players having been burnt by failed attempts to weaken the French franc in recent years, most traders insist there is little

stomach for speculation at the moment. However, as Emu approaches, many admit there are likely to be tensions emerging, not only around the currencies which might be left outside Emu - but also for the currencies

Some market players believe this intervening period could trigger considerable market volatility. For if market traders believe that the currencies will be fixed in 1999 at rates which differ from the rates in force in mid-1998, they will bet on different exchange rates in their dealings.

In legal terms there is little that the EMI or Commission could do to combat this because the fixed exchange rates do not legally start until 1999. However. some policy makers are already casting around for other solutions.

Gillian Tett on how the law might be used to fight currency speculation in the transition

tracts at its meeting on May 22, but that a final decision at last

week's cabinet session had

been postponed because of

opposition from sections of Mr

Kohl's ruling Christian Demo-

cratic Union, who fear that

German companies will suffer

Bnt the US officials said Mr

Kohl's government had indi-

cated it was prepared to insti-

tute special fast-track court

procedures which would

require a decision within 35

days. Those proposals, once

submitted by the government,

would be able to overcome par

liamentary and other opposi-

tion, the US officials said.

adding that access to the

courts was also required under

are suggesting is not a solution

from the EU point of view nor

from our point of view," a US official said. "Something short

of access to the courts would

"What the people at the BDI

European Union guidelines.

as a result of the changes.

which are potentially members.

The EMI has voiced concerns about the period when the single currency finally replaces national currencies in the Emu "area" in 2002. Although the Euro notes and coins will be introduced from January 1 2002, national notes and coins will still circulate until July 2002. To clarify this in legal and practical terms, the EMI is suggesting that this period should be shortened.

However, it is at the earlier end of the time spectrum, around 1999, that the ambiguities create the dangers for currency speculation.

According to the current timetable, the members of Emn are due to be announced in mid-1998. However, Emu itself - and the irrevocably fixed exchange rates - will not start until

German government

Kohl's cahinet postponed a final discussion last week

about the legal changes needed

to ensure that companies such

as General Electric could seek

A BDI official said compa-

nies should use a new arbitra-

tion procedure under the

supervision of Germany's car-

tel anthorities which has been

implemented during the last two years and could reach

quicker decisions. But US offi-

cials in Bonn said General

Electric and Westinghouse bad

used these procedures but were

not satisfied with them. "We

have been patient for a number

of years, giving this situation a chance to work," a US official

The BDI's resistance throws

doubt on whether the US and

Germany can reach final agree-

ment on a problem which has been troubling their relations

Ms Charlene Barshefsky, act-

ing US trade representative.

said earlier this week that the

said, "but it has not."

for several years.

Mr Alexandre Lamfalussy, president of the EMI, for example, has suggested that to avoid speculation the future cur-rency rates should be pre-announced when Rmn membership is announced in mid-1998

the Commission. However, it has been welcomed by some market players -although they warn it would be effec-tive only if central banks were prepared As Mr Avinash Persaud, head of cur-

The idea is viewed with caution in

rency research at the US bank JP Morgan in London, says: "I am already tell-ing my clients that Emu-could start in the middle of 1998."

However, the other ambiguous area, which has triggered the current legal debate, concerns the transition period between 1999 and 2002.

During this period, national notes and coins will remain in full circulation. But since the different national notes will only be separate expressions of the same currency - the euro - they will be freely convertible with each other at fixed, "irrevocable" exchange

In theory, this means that there will be no more room for currency speculation. In practice, however, the crucial question will be whether dealers will be prepared to bet that the supposedly "irrevocable" exchange rates might be changed in the future, or Emu itself fall

The RMI wants to discourage this by insisting that contracts which do not respect the official rates are unenforceable. However, banks themselves remain deeply split over how effective these legal tools might be.

Some suspect that they are likely to be all but irrelevant, since there will be relatively little room for speculation. But others warn that legal tools would simply drive trade abroad, not least because it is unlikely that EU law would be fully recognised in other markets such as New York.

But either way, most bankers - and many policy makers as well - suspect that if market speculation does emerge, it is likely to be a symptom, rather than the cause, of broader problems.

As one banker says: "The only thing that will stop markets speculating will be a belief that Emn is thoroughly credible in political and economic terms. That is far more important than any of the legal stuff."

# Brussels urged to boost challenge to illegal state aid

By Neil Buckley in Brussels

**EU** companies should bave stronger powers to sue com-petitors that have received illegal state aid in their national courts, according to Unice, the European employers' federation.

Unice also urges that procedures for vetting aid cases by the European Commission should be overhauled. Increas-ing numbers of aid cases are being approved by the Commission when they should be blocked, because inquiries are poorly publicised and competitors' views not properly can-vassed, the federation says.

Unice says 50 challenges to state aid rulings by the Commission are now pending in the European Court of Justice, compared with a total of only 100 state aid judgments made by the court to the end of 1993.

In a paper sent this week to Mr Karel Van Miert, EU competition commissioner, Unice calls for a "procedural regulation" laying down comprehensive rules on what constitutes state aid, bow inquiries should be publicised and third parties consulted, and time limits for

investigations The regulation would be similar to that which sets out the way the Commission vets merger cases, to ensure they do not damage competition.

It also calls for a "remedies directive" to guide national courts in dealing with dam-ages claims against companies that have benefited from illegal subsidies, and to encourage competitors to bring such cases. At present, Unice says, the maximum penalty the Commission can impose is to force companies to repay illegal aid. The role of national courts is still unclear, in spite of new Commission guidelines this year.

come after it warned in a paper last year that excessive amounts of state aid were still being approved to EU compa-nies. The latest available fig-wes, for 1992, show industrial state aid alone totalled Ecu34bn (\$42bn), or Ecu1,200 for every employee in the

Unice's recommendations

Mr Dirk Hadig, chairman of Unice's company affairs committee, said state subsidies lowered the break-even point for companies, allowing them to cut prices and drive out competition. "State aid really goes to the heart of Europe's competitiveness, and its

attractiveness as a place to invest," Mr Hudig said. Controversial cases this year including approval of a Pta87bn (\$713m) aid to Iberia. the Spanish airline, and the revelation that state subsidies to Bremer Valkan, the German shipyard owner, were diverted into projects different from those for which they were granted, have fuelled

demands for a review. Mr Jacques Santer, Commis-sion president, has also called for a re-examination of state aid as part of his "confidence pact" for employment. He believes too much aid is going to heavy industry to save jobs, rather than to research and development projects and small enterprises that could

Mr Van Miert has proposed changes, including doubling the minimum size of state aids on which the Commission rules to Ecu200,000 to give his hard-pressed staff more time to judge big cases. Unice says even that threshold is far too low; It suggests Ecu50m.

#### EUROPEAN NEWS DIGEST

# Court rules on EU job barriers

A German musician whose request to join the Athens opera was turned down on the grounds of nationality has had his complaint upheld in the European Court of Justice.

The judgment reinforces the principle of freedom of movement of workers inside the EU to the public sector, and covered similar complaints from the European Commission about Greek barriers to employment in the electricity, gas, transport, teaching and communications sectors.

The Court also found that the Belgian government operated

barriers to foreigners seeking jobs in the gas, electricity and water industries. It ruled that the Luxembourg government was restricting access to jobs in the area of public utilities. scientific research, communications and the public health

The rulings mean that Belgium, Greece and Luxembourg must end discrimination on the basis of nationality and scrap. barriers preventing workers from other EU member states from competing for jobs in their public sectors.

The Court said restrictions on foreigners could only be

justified where the work related directly to the exercise of public authority. Belgium, Greece, and Luxembourg were all Lionel Barber, Brussel asked to pay costs.

#### Probe into Crédit Foncier aid

The European Commission is today to launch an investigation under state aid rules into the French government's plans to rescue Crédit Foncier de France, the troubled property lender The French government has said it would guarantee CFF's debt after the lender announced a loss of FFr10.8bn (\$2.32bn), largely as provision for bad investments in real estate.

The loss followed the ending last year of Crédit Foncier's

monopoly on government-backed housing loans. The commission is likely to examine the terms of the French government's guarantee of FFr260bn of bonds, to ensure they do not contravene state aid rules. The French authorities will also be asked to disclose the size of any subsidies paid to the bank. The government has given CFF until July 31 to present its restructuring plan. Voting on a plan presented by minority shareholders to CFF's shareholder meeting on Friday to split the bank into two units was delayed after pressure from large Neil Buckley, Brussel

■ The European Commission yesterday approved acquisition by Caisse Nationale du Credit Agricole of 51 per cent of Banque Indosuez, a unit of Compagnie de Suez, and cleared Bayernwerk to acquire 25 per cent of Germany's Erdől-Erdgas Gommern, currently owned by Gaz de France. Neil Buckley

#### Greenpeace manager dismissed

Greenpeace, the international environmental organisation. suffered a setback to its campaign against Danish industrial fishing of tobis off the east coast of Scotland, when Greenpeace Denmark dismissed its manager, Mr Mats Abrahamsson, on Monday night.

Tobis, are used for production of fishmeal and fish oil, an industry dominated by the Danes in northern Europe. Over the past 10 days a ship sent by Greenpeace International to the Wee Bankie, about 30km off the east coast of Scotland, has tried to sabotage fishing by Danish trawlers on the grounds that industrial fishing destroys the region's food chain.

Mr Abrahmsson, a Swede, supported the action against the Danish trawlers, but the Danish organisation's campaign manager, Mr Klaus Iversen, was critical of the campaign and the means used against the trawlers. At a five-hour meeting on Monday evening, attended by a senior representative of . Greenpeace international, the Danish organisation's governing board fired Mr Abrahamsson. Hilary Barnes, Copenhage

#### Ukraine bank cuts discount rate

77.22.

. L.

Ukraine's central bank lowered its yearly discount rate 10 points yesterday to 40 per cent, as its inflationary outlook improves during the summer months.

The government's stabilisation efforts have managed to : to 0.7 per cent in May, the lowest rate since Ukraine gained independence in 1991.

The bank's interest rate action is intended to revive stagnant output and lessen liquidity problems at commercial banks, which have not fully subscribed to government bonds. due to cover 32 per cent of the fiscal deficit this year. Meanwhile, Mr Roman Shpek, Ukraine's chief contact with

western financial agencies, was demoted yesterday from deputy prime minister to head of a new development agency. His departure from the cabinet is part of an ongoing reshufile. The move reduces the number of deputy prime ministers, as mandated in the constitution. But Kiev appears eager to reassure the International Monetary Fund and the World Bank that economic reformers will continue to play a leading role in negotiating loans. Matthew Kaminski, Kist

#### Tudjman TV show dropped

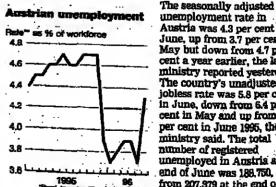
Croatian state television, controlled by President Franjo Tudjman's government, has cancelled its only programme that was critical of the Croatian leader and his ruling party. Staff of the programme Slikom na Sliku, or Frame by Frame, said yesterday they had received no explanation. The senior news editor at Croatian state television said the

programme was cancelled as part of a new summer schedule, and that it would be merged with another news programme. The 45-minute show was the only Croatian state TV programme that covered the opening of a trial last month against newspaper journalists accused of insulting Mr Mr Tudiman and his Croatian Democratic Union have come

under concerted criticism for muzzling the media. Croatia was conditionally accepted earlier this year for numbership of the Council of Europe, a stamp of acceptance in the family of European democracies. But the Council in May backtracked on that decision because of issues including Mr Tudiman's refusal to allow an opposition politician to become mayor of Zagreb, the capital.

#### **ECONOMIC WATCH**

# Austrian unemployment rises



unemployment rate in . . Austria was 4.3 per cent in June, up from 3.7 per cent in May but down from 4.7 per cent a year earlier, the labour ministry reported yesterday. The country's unadjusted jobless rate was 5.8 per cent in June, down from 6.4 per cent in May and up from 5.4 per cent in June 1995, the ministry said. The total number of registered unemployed in Austria at the end of June was 188,750, down from 207,879 at the end of мау.

EU consumer prices rose a provisional 0.2 per cent in May from a month earlier, giving a 2.7 per cent annual rise, the EU's Eurostat statistical office said. In April, prices rose 0.4 per cent on a monthly basis and 2.7 per cent year-on-year. Eurostat said that using its so-called interim index, constructed for monetary union convergence assessment, the EU's annual inflation rate in May was a provisional 2.7 per cent, against a provisional 2.8 per cent in

Belgian unemployment fell slightly to 12.8 per cent in June from 13 per cent in May, the Belgian government sald .

yesterday. June's rate is also down from 13.1 per cent for June 100c

# Heavy blow for contracts deal opposed EU fishermen

By Neil Buckley in Brussels and Alison Maittend in London

The European Union's fishing industry suffered another heavy blow yesterday when the European Commission halved this year's quotas for herring fishing in the North Sea to avoid a collapse of the

The emergency measure comes only weeks after the Commission warned member states they would have to cut fishing fleets by up to 40 per cent from next year to safeguard other over-exploited The Commission agreed with

non-EU member Norway, with which it jointly manages North Sea stocks, to halve herring catches this year. The quota for the eight EU states fishing for herring will be cut from 313,000 to 156,000 tonnes in the North Sea, and from 120,000 to 90,000 tonnes in the Skagerrak and Kattegat waters around Officials said a "drastic

reduction" was the only way to

fallen to half minimum levels advised by scientists. Herring fishing was banned between 1977 and 1982, when stocks came close to being wiped out. The Commission is also acting for the first time against industrial fishing fleets, oper-ated mainly by Denmark. "Bycatches" of young herring by industrial trawlers, fishing largely for sprat for fishmeal,

will be limited to 143,000 tonnes after previously being unrestricted Demands to reduce fishing fleets to protect stocks are expected to provoke clashes between EU states and the Commission in coming months, as the precise cutbacks each state must make

are negotiated. Mrs Emma Bonino, the fisheries commissioner calling for the cuts, has been the target of hate mail from fishing communities. But yesterday's measures were reluctantly wel-comed by government officials in the UK, one of her sternest

The UK faces a halving in its herring quota to 24,640 tonnes. "If cuts of this magnitude are not made, we face the complete closure of the fishery next

#### mean that we [the US and Ger-many] would be back in con-flict." The BDI spokesman US would give Germany until September 30 to find a solution avert a freeze on herring fishing, after reports from the International Council for the to the problem. acknowledged that EU guidelines required legal protection US officials said the cabinet for companies dissatisfied with had discussed draft changes to Exploration of the Sea warned ensure that Chancellor Helmut the law on public sector conthat mature herring stocks had year." said a spokesman.

# Bildt visits new Bosnian Serb leader

Peace envoy keen to find out if Mrs Plavsic's takeover from Karadzic is genuine But they are equally adament

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GERMANY: By Laura Silber and

Mr Carl Bildt, the peace envoy to Bosnia, yesterday called on Mrs Biljana Playsic, the Serb nationalist politician, in the bope of winning assurances that her takeover of power from Mr Radovan Karadzic, an indicted war criminal, was gen-

While the meeting itself - in the Bosnian Serb "capital" of Pale - amounted to a cautious gesture of faith in Mrs Plavsic, aides to Mr Bildt said he would watch closely to age who wielded real power in the

mountain stronghold. If Mr Karadzic, who has gone through the motions of transferring power to Mrs Playsic, continues to pull the strings, the Swedish envoy will have

no choice but to call for the reimposition of sanctions against the Serbs. But Mr Bildt's team is under-

stood to be acutely conscious of the drawbacks of this option. It fears that the reimposition of punitive measures would amount to an admission that there is no early prospect of reintegrating Bosnia. This would render almost pointless the pan-Bosnian elections scheduled for mid-September. Mr Evgeni Primakov, the Russian foreign minister, pointedly reminded his western counterparts at last week-

end's Lyons summit that the system of UN sanctions in ex-Yugoslavia is supposed to lapse 10 days after free and fair elections. He successfully demanded this point be reaffirmed in the to be imposed at any moment.

Lyons communique. However western officials have baulked at Russia's claim that the impending lapse of the UN sanctions regime makes all talk of fresh punishment irrele-

The US and its European allies could impose an entirely new package of punitive measures, even if they were not endorsed by the UN as a whole, they argue. It is also possible that the elections will be beld as planned, and then declared to have been less than free and fair in the Serb mini-

British officials have argued strongly that a set of possible sanctions against the Bospian Serbs - including economic, political and cultural isolation should be held in readiness

that punitive measures should not initially be applied to Serbia proper, as long as there is some bope of Belgrada playing a constructive role. "We are pleased with what Bildt has achieved so far, but it does not go far enough," said one British official, referring to

the Swedish envoy's efforts to sideline Mr Karadzic Among US officials, the tone is stronger. "Bildt has been burned twice, and this time Western governments must take action," said one.

Meanwhile the tough stance adopted by Moscow at the Lyons summit has reminded western government that Russia could again become a wild card in Bosnian diplomacy, regardless of who wins today's election. Geoeral Alexander

Lebed, the strongman in a new Yaltsin administration, and communist challenger Mr Gennady Zyuganov were furious bombing campaign against the Mr Yeltsin abruptly toned

down his criticism of western policy in ex-Yugoslavia last October in what many observers viewed as trade-off with President Bill Clinton: Russia would give the west a free hand in Bosnia, on the understanding no concrete moves would he made in 1996 to enlarge Nato.

Whether or not such a formal undertaking exists, Nato expansion will be back on the agenda this winter, the very time when the UN Security Council will be considering its

عدا من الألمل



Prime Minister Klaus chooses cabinet to rule with minority

# End of Czech uncertainty

Mr Václav Klaus was reappointed prime minister of the Czech Republic yesterday for a second term, a key step in his attempt to put a new minority government in place following an inconclusive gen-eral election last month. Mr Klaus also submitted a

list of proposed cabinet members to President Václav Havel, who is expected to swear them in tomorrow. Mr Klaus had earlier handed to the president the resignation of his outgoing government, which lost its parliamentary majority in tha election last month.

The prime minister's Civic in office. Democratic party (ODS) has

formed a new coalition with nalled a willingness to comprothe Christian Democrats (KDU) and the Civic Democratic Allimise in order to secure that support, but it is not yet guarance (ODA), its partners in the Some of the CSSD's demands former government. They hammered out the substance of a have already been met, includ-

ted final agreement in about 10 party officials to parliamentary Following his election last He said he should be able to present the programme to par-liament "around July 16 or 17" week Mr Zeman gave a further sign that the party's support and seek a vote of confidence. would be forthcoming by mak-The new coalition, with 99 of parliament's 200 seats, needs the support of the main opposiing a conciliatory acceptance

tion Social Democrats (CSSD) back the coalition in office for its full four-year term to win the vote and to survive although there is a widespread The four parties have sig-

It is possible the CSSD would

ing the election of its leader,

Mr Milos Zeman, as chairman

tration will not survive that long. Within the new cabinet the ODS has retained its influence over financial policy and foreign affairs, but has been forced to surrender the large majority it enjoyed in the old Dublin's presidency of the European Union to highlight the need for co-operation in

It will take eight of the 16 of parliament and of senior posts, including that of prime minister, with the KDU and the ODA taking four each. The list of proposed minis

ters contains six new faces but only one new portfolio, a ministry for regional development while the privatisation and economy ministries are abolished. Mr Havel has already indicated that he does not see any barrier to approving the

night, is a direct response to public anger at the killing of Veronica Gnerin, a crime reporter shot in her car last Friday, allegedly by gangland The government reform changes to the bail law and police detention periods, tha curtailing of the right to silence, and more resources to improve the police and prison

systems. Adoption of an oppo-

sition Fianna Fail proposal

egainst organised crime, using

the opening day of business of

tackling the problem of drug

The package of measures,

approved by the cabinet last

part of the package. In addition, the government is said to be considering the appointment of a special prosecutor, similar to what hap-pened in Italy to combat the

arguably no worse than in other European states. But it The frish government has been allowed to flourish in yesterday launched a drive a climate of lawlessness, which many politicians believe is a direct spillover from Northern Ireland's 25 years of

Irish crime puts

EU in shade

paramilitary violence. Irish police said vesterday former paramilitaries may have been involved in what is believed to have been a contract killing of Gnerin. Treland didn't have a crime problam in the 1960s. But always when there are people using guns for a cause there will be those who use guns for their own ends," said Mr Joe Costello, a Labour party MP in

Dublin. Without a forthright policy response from the govern-ment, some deputies worry the republican movement may seek to exploit the situation for political gain. Already a paramilitary involvement is suspected in a number of vigi-lante beatings of drug pushers in Dublin's inner city.

giving courts the power to freeze assets of suspected drug barons is also thought to be Police were also last night investigating a possible Ms - Rolsin Shortall, a Labour party MP involved in campaigning against drug

# Brussels warning over French TV's health kick

and Andrew Jack in Paris

France has been given 40 working days by the European Commission to lift restrictions on the TV broadcasting of sporting events where hoardings advertising alcoholic drinks and tohacco can ha clearly seen by viawers.

If the French government fails to comply, it faces being taken to the European Court of Justice, the Commission

warned yesterday. The Commission is arguing that the restrictions on TV broadcasts under France's Loi Evin violate EU rules on the freedom to provide services. The Commission has sent a ment proceedings - to France. The Commission said it was the first time a case of this kind had reached this stage.

The Commission's action was sparked by the banning of a screening by the French TV channel, TFI, of a European football match in March 1995. Since then, other sporting events have also been banned on the grounds that alcohol adverts were visible.

The objective of protecting public health was fully supported, the Commission said but "in this instance" it considered that "the measures taken to interpret and apply the relevant French legislation are not proportional to this objective". Mr Philippe Boucher, direcing, said yesterday that the decision by Brussels would lead to new efforts to call for a complete ban on alcohol and tobacco advertising at sports

This could backfire against the advertisers," he said. "The fact that there is this type of advertising at sports events at

all is more shocking than the fact that it is broadcast. This will put pressure on lohbying of international sports organisations to introduce a total ban." He pointed out that many football clubs were currently supported by public funding, which strengthened the argument for a ban in the

governing programme in talks

over the past month, and Mr

Klaus sald yesterday he expec-

interests of public health. He said that the French legislation to ban alcohol and tobacco advertising in sports events was already periodically bro-ken, and that the Brussels decision served simply to clarify

The CSA, the French audiovisual regulator, filed a comIt claimed was targeted to reach the French market. However, since that time the CSA has changed its president.

plaint with the public prosecu-tor last year after TF1 broad-cast football games from other

countries but with advertising

# "reasoned opinion" - the sec-ond stage of formal infringe-mittee against excessive smok-Greek PM \*leads party out of east

or a man once dis-missed by party col-leagues as "wimpish", Mr Costas Simitis, Greece's prime minister, showed unexected determination in shouldering aside rivals for com-Panhellenic Socialist Move-

Moreover, Mr Simitis's electinn on Sunday as Pasok's chairman at a special congress shattered a popular Greek myth. The myth is that technocrats are useful to manage the economy and smooth ont Greece's prublems with the EU, but that only a charismatic personality can lead a political party.

One analyst said: "Pasok has signalled its re-invention as a European socialist party that can respond to what's happening in Greek society, rather than the concerns of the party leader and his hangers-on.

In an unprecedented display of openness by Pasok, state television broadcast the party congress live. Greek viewers watched a dramatic leadership battle in a smoke-filled hall at the Athens Olympic stadium, including a desperate appeal for support by Mr Simitis's populist rival, Mr Akis Tsochatzoponlos, the public administration minister

Under the late Andreas Papandreou, who founded Pasok and remained its leader until his death last week. party congresses were as secretive as in communist eastern Europe. Central committee votes were frequently rigged and no challenge lo Papandreon's supremacy was permitted. Pasuk members say. Bowever, Mr Simitis's victory was as much the result of cultivating support for his moderate pro-European policies among younger Socialist organisers around Greece as his performance at the con-

Even before becoming prime minister, Mr Simitis had developed a network of supporters in local Pasok organisations which elected the 5,100 delegates to the congress.

To secure support from Pasok hardliners, Mr Simitis could point to an impeccably leftwing background. His father, a prominent lawyer, was a member of the commnnist-led "Monntain Government" during Greece's civil war in the 1940s and several close advisers started their political careers as members of a Maolst communist splinter group that attracted Greek intellectuals in the 1970s.

Tha challenge for Mr Simitis is not just to keep control of Pasok but to implement policles that conflict with much that Mr Papandreou stood for, including cuts in government

spending, reductions in the bloated public sector payroll and a more flexible foreign policy, especially over Turkey. Since taking over as prime minister from Mr Papandreou in January, Mr Simitis has

US mediation to defuse a crisis with Turkey and for giving mixed signals to investors. As party leader, Mr Simitis finally controls the levers of becomes a Socialist partiamen-

power. He will decide who tary candidate in the general election next year. Now that his supporters dominate the 200-member central committee which will elect Pasok's new executive hurean later this week. Mr Simitis will be able to promote his reformist policies more effectively.

Thanks to strong backing at the congress from Mr George Papandreon, the education minister and former premier's eldest son. Mr Simitis can also claim a share in Mr Papandreon's heritage - which will exert a powerful pull on the Socialists for some time. On his first day as Pasok chairman, Mr Simitis made a point of going to the central Athens cemetery to lay flowers on Mr Papandreon's grave.

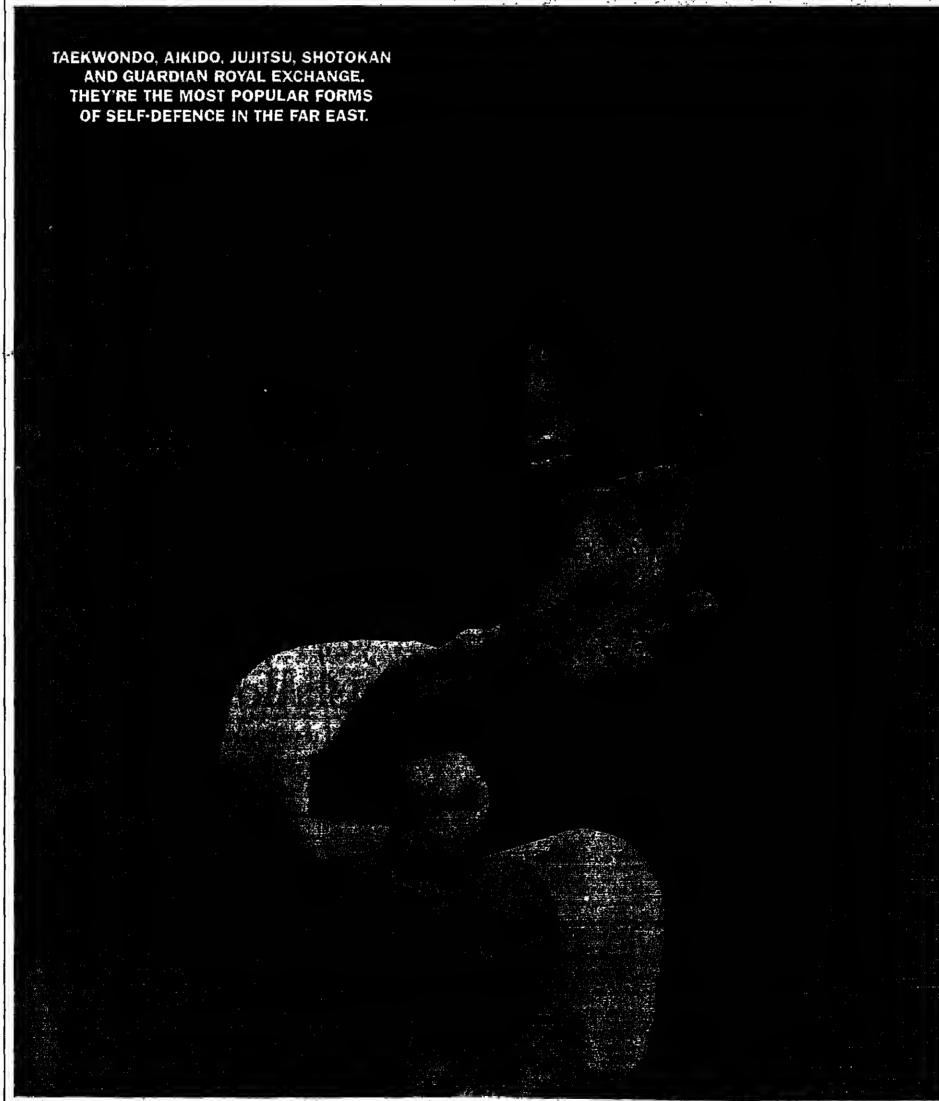
However, Pasok's populist wing which gave Mr Tsochatzopoulos 46 per cent of the vote, will find it bard to accept defeat. The populists are used to profiting from the pervasive patronage system and will try tn nndermine Mr Simitis unless be carries ont a purge of Mr Tsochatzopoulos's sup porters in the party machine.

split in Pasok seemed exaggerated, given Mr Simitis's high approval rating In opinion polls, which favour his chances of leading Pasok to a sweeping election victors next year against a we servative opposition. Government advisers say there are no immediate plans to sack populist cabinet ministers.

The main battleground will be the public sector, where employment has increased by more than 2 per cent in the past year as Mr Tsochaizopouios, responsible for both the civil service and local government, allowed his supporters to hand out jnbs to Socialist voters in defiance of a government hiring freeze.

Mr Simitis's first task is to push through much-postponed legislation for spending cuis aimed at bringing down the government deficit by 1.5 percentage points of gross domes tic product next year, in line with Greece's effort to meet the Maastricht targets for EU

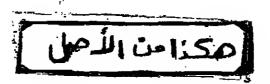
Kerin Hope



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KwaZulu result

good for peace

Final election results issued yesterday for South Africa's most unstable province, KwaZulu Natal, showed President Nelson Mandela'e African National Congress winning the towns while

elections, both with strong majorities. Political analysts sald the equilibrium was good news for peace. "It would have been disastrous for peace if there had been a complete rout of Inkatha," said Kiru Naidoo, a political scientist at the University of Durban-Westville. Election officers declared the

final result of last Wednesday's poll after six days of vote counting. The Inkatha Freedom Party won 44.5 per cent of the

vote to the ANC's 33 per cent. The ANC's share of the vote remained largely unchanged since the historic all-race national election of 1994, but Inkatha lost six percentage

bitter rivals lokatha took the countryside in the local

INTERNATIONAL NEWS DIGEST

# Rifkind brushes aside Massaari affair

By Roula Khalaf in Jeddah

Mr Malcolm Rifkind, the UK foreign secretary, claimed yesterday that the presence in Britain of Mr Mohammed al Massaari, the Saudi dissident, had become "irrelevant" in British-Saudi reletions.

UK officials said the Saudis realised that the UK government had done all it could, albeit unsuccessfully, to deport Mr Massaari, who has been waging a fax campaign aimed at discrediting the Saudi government. They also realised that drumming up the issue

and had raised the dissident's profile in the international

claimed that Sandi irritation with Mr Massaari has led to discrimination against them. British businessmen had been looking to Mr Rifkind's trip to smooth recently atrained relations with the kingdom. After meeting Crown Prince Abdullah and Prince Saud Al Faisal, the foreign minister, Mr Rifkind said UK-Sandi trade and commercial relations were "extremely good" and had not been affected by Mr Massaari'e

The subject of the dissident was mentioned only once in discussions "very briefly and to dismiss it as a matter of irrelevance to British-Sandi relations," Mr Rifkind said. He cited trade figures which show a healthy relationship. Exports to Saudi Arabia were up 9 per cent in 1995 and increased by 20 per cent in

Officials said UK companies should wait to see if they had been included in the Saudi oil company Aramco's bidding lists in August, before insisting that the Saudis continue to

1995. He also needs to try to curb an annual rate of

inflation heading towards 15

per cent, against 8.1 per cent

last year. Mr Netanyahu's economic team is also facing new signs

of an Israeli slowdown. The

Bank of Israel said on Monday

that its index of integrated

indicators, e measure of overall economic health.

declined in May to 0.7 per cent,

its first retreat in almost two

Markets welcomed the

the first quarter of this

discriminate against British UK officials said the future

of the Arab-Israeli peace process following the election in Israel of Mr Benjamin Netanyahn, the Likud hardliner, featured prominently in the foreign featured secretary's discussions with Crown Prince Abdullah. Mr Rifkind said yesterdey that much of what had been achieved in the last three years

of the peace process was

irreversible, but warned that

some of it could be damaged. UK officials said Mr Rifkind

"appears to be a lot of interest" from Sandi officials for a UK. proposal for an international initiative to exclude from the 1951 UN convention on refugees asylum seekers who inclte others to commit

talks had been based.

He added that the edoption of the UK proposal by the United Nations as a

agreed that Arab states should allow time to see whether Mr

Netanyahn followed through

with his stated positions,

rejecting the land-for-peace formula oo which Arab-Israeli

Mr Rickind said there

would require a definition of terrorism, which he believed could be agreed.

· Mr Rifkind arrived in Saudi Arabia a few days after a truck bomb exploded at a US Air Force housing compound near Dhahran, killing 19 Americans. Security has been heightened throughout the kingdom and road blocks set up during the night. Mr Rifkind was confident Saudis were providing the necessary protection for British nationals. Britain has 3,500 workers in Dhahran, including 200 Royal Air Force personnel.

Copper broker suspends staff

points to smaller parties.

Rudolf Wolff, the London-based metals broker, said yesterday it had suspended three employees in its Tokyo office as part of an internal inquiry into the firm's dealings with Sumitomo Corporation in the copper market. The three staff, all Jepanese, were suspended on full pay pending the completion of Wolff's investigation, which includes a review of back office procedures. "There are some elements of paperwork that we need to follow through," the broker said.

The inquiry began after regulators in the UK and US asked all companies which had dealings with Sumitomo to review

all companies which had dealings with Sumitomo to review their records in the wake of the Japanese company's dismissa of Mr Yasuo Hamanaka, its former chief copper trader, Wolff said its Tokyo operation, which employs 10 people, produced only 4 per cent of annual worldwide revenues of about \$45m, although Sumitomo eccounted for a considerable portion of Clay Harris, Londo

Capital penalty for dollar users

Sudan's government has threatened to execute Sudanese who use US dollars or other hard currency. Sudan fears the flight of much-needed hard currency, which it uses to pay \$\sum \text{im e}\$ month to the International Monetary Fund and to purchase an estimated \$360m a year worth of oil. Police on Sunday arrested an undisclosed number of people suspected of dealing in hard currency, but their punishment was not immediately announced. Inflation is at 108 per cent, making the stable dollar increasingly more popular. The bank said the dollar was used to buy and lease real estate and for payment of hospital AP. Khartan

Iraq poser for UN chief

United Nations chief Mr Boutros Boutros Ghali will have to overcome US objections to an Iraqi distribution plan for humanitarian supplies if an "oll-for-food" deal is to go ahead, diplomats and UN officials said yesterday. While legally Mr Boutros Ghali alone has to approve Baghdad's plan, the US and the other 14 Security Council members on a sanctions committee could block agreement of purchasing documents and contracts needed for each sale under the scheme.

Ms Madeleine Albright, US envoy to the UN, on Monday rejected the food distribution plan proposed last Thursday by Mr Abdul Amir al-Anbari, the Iraqi negotiator. She accused Baghdad of attempting to twist a purely humanitarian scheme, designed to provide ordinary Iraqis with food and medicine, by including such items as telephone-switching gear, computers and other equipment.

Israel takes first step of sweeping plans for fiscal restraint and privatisation

# Determined Netanyahu pushes through \$1.5bn budget cuts

israel's new government yesterday approved plans to cut Shk4.9bn (\$1.52bn) from its 1997 budget, part of prime minister Mr Benjamin Netanyahu'e sweeping plans for fiscal restraint and privatisation. It also agreed to reduce the budget deficit as a percentage of gross domestic product to 1.5 per cent by the year 2001, from an estimated

2.8 per cent in 1997.

The ministers voted for the cuts without agreeing on which portions of the budget would be slashed, but the defence, education and social welfare sectors expect to be the targets of the biggest cuts. The pensions of career soldiers are also likely to be scaled back. Mr Eli Yosef, finance ministry spokesman, said the issue of where cuts would be made would be addressed during two special finance sessions to be held early next

Mr Netanyahu is apparently determined to gain determined to gain government approval of his ecocomic plans before be leaves for the US next week,

enabling him to tout its details to US business leaders and

The prime minister has been eager to implement plans for trimming Israel's bloated current account deficit and for selling state-owned businesses to offset his hardline political approach to Middle East peace. After wresting power from Mr Shimon Peres in May, Mr Netanyahn inherited an economy with a current account balance of payments deficit that is forecast to widen to \$5bn this year from \$4bn in

decision to pare the deficit, as Israel: tackling the deficits

Budget belence (as a % of GDP) 1991 92 93 94 95 96 97

(85 8 % of GDP)

shares that had been hovering quietly most of the day rose after the vote. The benchmark Mishtanim index of top 100 shares rose 0.60 per cent to 198.46 from 197.28.

Israeli workers end pensioners are not likely to swallow Mr Netanyahu's reforms so easily. Hundreds of thousands of public workers staged a one-hour strike on Monday to protest a planned sell-off of government assets. Bank and government offices, air and sea ports, and even Israeli Radio and El Al airlines closed for an hour as a warning against Mr Netanyahu's plans. Mr Amir Peretz, head of Israel's umbrella lebour

organisation, the Histradrut, said: "To our dismay we will have to go out and fight against these decisions, which will hit salaried workers and disadvantaged populations." But he stopped short of Mr Dan Meridor, the finance minister, defended the plan to curb the deficit, warning that stens needed to be taken now lest Israel face "more severe cuts" further down the road.



Benjamin Netanyahu (right) confers with Bank of Israel governor Jacob Frenkel before yesterday's cabinet meeting

#### **NEWS:** WORLD TRADE

# investors in Vietnam face stricter regime

By Jeremy Grant in Hanoi

Foreign investors who spent nervous months awaiting the outcome of Vietnam's Communist party congress before committing themselves to new projects were little the wiser yesterday, despite clarification of plans to plant Communist party cells into enterprises which have foreign investors.

Some changes are oow expected in October, when the foreign investment law will be improved and there could be sweeping changes to top personnel in ministries in frequent contact with foreign But opportunities for foreign-

ers could diminish after the congress pledged to beef up local industry and encourage a more selective approach to foreign investment. Party officials at the meet-

ing, which eoded on Monday, stressed that foreigners were still welcome to invest. But a five-year plan said foreign money would be chaonelled towards areas "with advanced technology" and those that "have a high export ratio".

One aim is to attract foreign investors into strategic sectors where the Vietnamese lack capital, technology and expertise. Inflows have so far been tilted towards tourism, light industry and services at the expense of mucb-needed power and infrastructure.

Another is to push its lumbering state sector into importsubstitution as a way of industrialising, and ensuring Vietnam is competitive enough to meet tariff reduction targets set for 2006, which it must meet under membership of the Asean Free Trade Area (Afta), This could close off some sectors to foreigners. "There will be an increasing number of sectors officially closed to forelgn enterprises or effectively

closed," said Mr Chris Bruton,

director for Thailand and Indo-

china at Bangkok-based Data-

Mr Do Quoc Sam, minister for planning and investment, said the foreign investment law would be amended in October to ease licensing bottlenecks and improve access to finance, but gave few details. The government would work with foreign companies to identify strategic projects. "The selection is a two-way process," he said.

Although economists give Vietnam credit for prioritising large-scale investments, crucial guarantees – such as being able to mortgage land and property - are not yet in place.
"When you talk about large

projects, there's no way to finance them. Very few people are going to be able to reach into their pockets and produce, say, \$300m just like that," said Mr Michael Scown, a lawyer with Russin & Vecchi in Ho Chi Minh City.

Meanwhile, all foreign joint ventures and wholly foreign-

Microsoft today launches the of its Windows 95 computer software system, following the Monday, AP-DJ reports.

Microsoft is confident that

the new law will be enforced. The law should reduce software piracy and foster the development of a Vietnamese software industry, the US company said.

owned projects would have to allow the formation of Communist party cells in them within six months from the day the project started, according to Mr Nguyen Van Tu, president of the country's sole, state-con-trolled trade union.

"If they refuse (to allow them) we will insert people by ourselves," he said. "Right now there are very few party cells in foreign joint ventures. We oeed to have party cells in every one." He said their function would be to educate local employees on the party'e work. Their existence reflects an increased desire from the Communist party to see increased surveillance of foreign activity but are being seen by many businessmen as an irritant rather than a threat to

Editorial Comment, Page 11

# India emerges as world centre for software

By Mark Nicholson

india's software industry grew rapidly in 1996-96, with turn-over up 61 per cent to \$1.2bn, and similar growth is expected this year, according to the National Association of Software and Service Companies. Exports, chiefly of software services, continued to outstrip the domestic market, rising 64 per cent to a record \$734m, a

Nasscom study shows.

However, the local market increased turnover by a record 57 per cent last year to more than \$490m, helped by a steep cut in daties on imported software packages to 10 per cent in last year's budget.

The Nasscom figures show India is emerging as a leading world centre for software services, particularly to the US, which accounts for around 60 per cent of exports.

More than 100 of the top 500

off-site software services from sales throughout the past six Indian industry having risen 35 \$2.5bn by 2000, could double. Indian companies, according to Mr Dewang Mehta, Nasscom's executive director.

Last year's growth compares with 45 per cent in the industry between 1991 and 1995. The sector employs 120,000 Indians in more than 700 companies, over 400 of which are exporters. It employed just 6,800 in 1985 and 56,000 in 1990. India's software industry is distinctive in that export mar-

vices are offered at the user's base, but Nasscom says off-site software services are rising as more Indian groups lease high-speed deta communica-

years as Indian-based compa-

nies have exploited an ability

to match high quality with rel-

More than 60 per cent of ser-

etively low labour costs.

tion lines. Mr Mehta said sustained export growth had continued per cent and 23 per cent respec-tively in the past two years. Mr Mehta said the motor for domestic growth would be in the banking sector, which was about to embark on widespread computerisation.

There are 6,400 branches of national banks in the country which, in the next three years. are set for complete computerisation." Nasscom estimates for the domestic software market. which expects turnover of

ther fillip through Indian companies offering solutions to the "millennium bug": the problem facing thousands of financial service and other companies worldwide whose software is not equipped to deal with the arrival of the year 2000. He said 74 Indian software companies were offering solutions to the problem, which

Nasscom estimated could earn :.

India up to \$1bn.

Exports could receive a fur-

# US election year politics puts free trade legislation on hold

Nancy Dunne tracks the record of a reluctant Republican Congress

ince it became Republican-controlled in January last year, the US Con-gress has failed to pass any trade liberalisation measure President Bill Clinton has been willing to sign.

What has turned delay into indefinite hold-up is the fact that this is in an election year are uncomfortable pushing free trade when many Americans think imports are costing US

This has not been a factor in trade legislation the Congress has succeeded in passing measures which have provided for aanctions against companies doing business with countries regarded as "outlaws", such as Cuba, Libya and Iran. One of the most important hold-ups has been renewal of the Generalised System of Preferences, which provides about \$430m worth of duty-free access on goods from developing countries. Renewal of the programme was contained in a hudget bill sent to President Clinton, but it was vetoed because it was attached to domestic budget measures deemed unacceptable by the

White House. The 20-year-old GSP programme is not controversial few members know what it is but support for it among congressmen is considered "broad and thin" by trade officials. Eighteen Republican senators wrote to Mr Robert Dole, wben be was still Senate

leader, to warn that the lapse of the GSP was having "nega-tive foreign policy implica-tions". At the same time many small businessmen who rely on GSP inputs have suffered

The House of Representatives has recently begun to move on trade matters. Last week it defeated by a surprisingly large 2-1 margin a mea-



sure to end China's most-favoured nation trading status equivalent trading rights to most other countries. And It has granted the same free trade treatment to products from Gaza, West Bank and regional trade zones as that given to Israel. It bas also granted MFN status to

which could have the effect of killing a long-sought deal with other ship-huilding countries in the Organisation for Economic Co-operation and Development to curb state subsidies to the industry. The Clinton administration is hoping the bill can be "fixed" in the Sen-ate but the trade unions are lohhying hard against it.
The OECD's deadline was

June 15. A Senate vote could come in mid-July, but it could be delayed until September. Another hill in the Senate, pushed by Senator Bob Gra-ham, a Florida Democrat, is designed to belp US tomato growers, who have asked the International Trade Commission for temporary protection from imports of Mexican tomatnes. The bill would make it easier for the ITC to recom-

mend protection. Before he resigned his seat to campaign full-time for the presidency. Senator Dole tried, but failed, to move longplanned legislation creating a commission of judges which would oversee rulings by dispute settlement panels of the World Trade Organisation. The legislation was supposed to have made it possible for Congress to take the US out of the WTO if any three decisions adverse to the US were judged by the commission to be "arbi-Romania and Cambodia.

Another bill passed by the House contains a 30-month extension of a shipbuilding loan guarantee programme by the commission to be "arbitrary or capricious". The Clinton administration had promised to support the bill in exchange for Mr Dole's backing for the establishment of the

WTO as the successor to the General Agreement on Tariffs and Trade.

Meanwhile, trade officials have abandoned hope that Congress this year will give the president renewed "fast-track" trade negotiating euthority that would allow the administration to negotiate Chilean accession to the North American Free Trade Agreement without Congress being able to amend the terms of the pact. The stalemate began over administration insistence that the pact include provisions on environment and lahour. which Republicans opposed. The US refused to go along with a WTO accord last year to

liberalise financial services and balked at a deal on basic telecommunications in April It has also failed even to table a negotiating offer in WTO talks on maritime services. Washington has argued, in all these cases, that its WTO partners' offers were inadequate. But other governments accuse the US of being unwilling to stand np to protectionist pressures from domestic producer lobbies in a presidential election year. Lobbyists for greater trade liberalisation fear that the election in November may see the return of more protectionist congressmen as happened in the 1994 poll. They would replace many departing members who have long championed open trade initiatives but

WORLD TRADE NEWS DIGEST

# Caricom fears deregulation

Leaders of the Caribbean Community (Caricom) meet today to speed up efforts to create a common market, amid concerns that the region's small economies are becoming increasingly uncompetitive because of deregulation in international

The four-day meeting in Barbados will also consider the impact of the North America Free Trade Agreement on the region. Caricom is uncomfortable, too, with proposed changes to the Lomé Convention, a trade and aid treaty with the European Union which expires in 2000. Some Caricom governments fear that they will lose preferential markets for bananas and rum, and that their eugar sales will be reduced.

Officials say the greation of the common market is the only

Officials say the creation of the common market is the only way the region can compete for markets. Caricom is made up of the English-speaking countries of the region, and Suriname, and has a market of 6m. However, some governments are worried that their economies could be damaged if their markets are opened fully to imports from more developed members of the community.

Attica enters fast ferry race

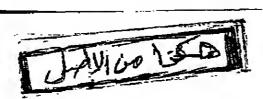
Attica Enterprises, a Greek ferry operator, has ordered two high-speed car ferries costing \$200m from Kvaerner Masa-Yards of Norway in response to growing competition on the Advistic the Adriatic crossing. The Greek company aiready has two fast ferries in operation between Patras and Ancona, a route

popular with both tourists and truck drivers.

In March, Minoan Lines, a Crete-based shipping company, ordered a \$102m fast ferry capable of 27 knots from Fosen MEK Versteer of Norway for the Adriatic crossing. The new ferries will be built at Kvaerner's shipyard at Turku in

High-speed ferries, some with a single hull, others of catamaran design, are starting to make inroads into markets dominated by traditional ferries. Stena Line, the Swedish ferry group, is introducing them on routes on the Irish Sea and the English Channel. Charles Batchelor, Transport Correspondent

■ Kyocera, the Japanese electronics and chip component maker, has launched a joint venture with a Chinese camera maker to manufacture and market cameras and other optical instruments in China. The new company, capitalised at \$19m, is expected to produce goods worth \$109m in the initial



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By John Burton in Secul

Mr Kim Young-sam, the South-Korean president, yesterday urged a halt to overseas holidays and consumer spending on imported luxury products as part of a campaign to reduce the country's yawning trade Mr Kim's remarks were in

response to a new government stimate that the current account deficit this year will grow to a record \$11bn-\$12bn. The widening deficit reflects the effects of currency appreciation, falling international prices for key export products, a surge of spending for

imported consumer products, and increased travelling abroad by Koreans. Addressing an emergency meeting of economic ministers, Mr Kim said the growing deficit also served as a warning that Korea was losing its international competitiveness dne to fundamental economic problems, such as rising wage costs, low productivity growth, and a heavy dependence on a

few export products. In an attempt to halt a sharp rise in wages caused by a tight labour market, the government decided to increase the number of imported workers from 20,000 to 80,000 and extend their contracts from two to

Officials will also attempt to broaden Korea's industrial hase by expanding into new sectors, such as environmental technology, and promote advanced products in existing industries, such as developing non-memory semiconductors and high-definition television. However, the government acknowledged that these pro-

grammes would not benefit the conomy in the short term. In growth at 7 per cent this year, spending will increase for infrastructure projects to offset the impact of a slowdown in exports and resulting cutback in industrial investments.

There was also concern about a rise in the inflation rate above the official target of 4.5 per cent for this year.

By Robert Taylor, Employment Editor

criticised by the Geneva-based International Labour Organisa-tion over its restrictive industrial relations laws and was told to let workers join the trade union of their choice.

The ILO governing body has just accepted a report from its freedom of association commitean government to modernise labour legislation that has been in force since the dicta-

Rhee in the 1950s. South Korea is pressing hard to become a full member of the Organisation for Economic Co-operation and Development and a decision on its applica-tion is expected in the autumn. But unless changes are introduced to ensure trade union freedoms observers believe it is

The ILO committee criticises last November's arrest and detention of Mr Kwon Youngkil, president of the Korean Confederation of Trade Unions (KCTU) and the government's

The government's arguments for not registering the KCTU because it violated - national laws are not persuasive since these laws are not in conformity with the principles of freedom of association,"

It urges the South Korean government "to take appropri-

relations reform to propose changes to bring the country's labour legislation into line

# Thailand's respected bank chief falls from grace

Vijit Supinit: thought to have compromised the bank's independence cal clout with the year-old Thai gov-

s governor of Thailand's cen-tral bank Mr Vijit Supinit was used to being the centre of attention at a party. So it was clear the end of his career was nigh when he received the cold shoulder

at a reception hosted by senior com-

mercial bankers and finished the

evening standing alone in the cor-

lt was a sad moment. A central banker for 30 years, Mr Vijit had kept a steady hand on the helm at the Bank of Thailand, helping the country's economy weather everything from a military coup in 1991 and a sustained attack on the currency in 1995 to the still-present dangers of an overheating economy. And he still found time to begin implementing a plan that has sub-stantially liberalised Thailand's capi-

tal markets, providing the country with much-needed investment capi-By the time Mr Vijit submitted his resignation yesterday, however, he was a spent force. Over the past six months, the former governor opened himself, and the hank, to unprece-dented political meddling by seeking to increase the central bank's politi-

Ted Bardacke explains why a steady hand at the helm has had to resign

First, he was widely thought to have co-operated with Mr Surakiart Sathirathai, former finance minister, in sacking the highly respected Mr Ekamol Khiriwat as head of the Securities and Exchange Commission. Mr Ekamol, who was also deputy governor of the central bank and therefore a potential rival to Mr Vijit, had caused early problems for the prime minister, Mr Banharn Silpa-archa, by threatening to resign

over "political interference".

Mr Vijit started an investigation into Mr Ekamol's affairs, including tapping phone conversations with top members of Thailand's financial community, which found the head of the SEC had "revealed state

Second, Mr Vijit is thought to have compromised the bank's independence. Many became wary when Mr Vijit said he would waive a key regulation preventing cross-holdings among financial groups to allow Finance One, the investment bank led by long-time friend Mr Pin Chakkaphak, to take over Thai Danu

And when the Finance One deal

that Mr Vijit participated in the decision to approve a stock market listing for a finance company in which he held shares, his reputation for probity suffered.

Impartiality is a particularly crucial concern for the Bank of Thailand because so much of the central bank's economic policy relies on a policy of "moral suasion" which can be highly discretionary.

In pursuing its tight money objectives, the bank has been unable to rely on instruments such as a discount rate or bond prices, both of which have little impact on the Thai market. Instead, commercial banks must toe the line on interest rates and credit growth for fear that the central bank might not approve things ranging from directorships to investments in hedging instru-

Third, revelations that Mr Vijit soft-peddled for months on warnings that a medium-sized commercial bank, the Bangkok Bank of Commerce, was engaged in dubious lending practices proved particularly damaging. Led by the recently indicted Mr Kirkkiat Jalichandra, a former central banker who rose

ernment and endear himself to new was closely followed by revelations under the tutelage of Mr Vijit, the bail-out of the Bangkok Bank of Commerce is expected to cost Thai taxpayers as much as \$2bn.

When the country's new finance minister, Mr Bodi Chunnananda. told Mr Vijit last month that it was time for interest rates to fall, posing a direct challenge to the central bank's so-far successful strategy of engineering a soft-landing for the galloping Thai economy, the governor could offer little resistance. Other bank officials questioned Mr Bodi's strategy, but the politicians have, for the moment gained the

upper hand. "The governor had to go," says Mr Graham Catterwell, head of equities at Deutsche Morgan Grenfell in Thailand. "The downward spiral of political intervention needs to be stopped and getting rid of Mr Vijit was the first step. But whether the trend will be broken or not depends on who is appointed as a replace-

"The current coverument is particularly worrisome on this issue," he says. "We could be seeing the beginning of sustained political intervention in the affairs of the Bank of

# Japan to throw money at research

William Dawkins reports on doubts that spending target will be met

ment yesterday moved to quash an old cliché, that Japan is good at developing existing ideas but weak at dreaming up new ones.

It aims to correct that shortcoming with a five-year "master plan" to spend Y17,000hn (\$155bn) on science and technology, agreed by the cabinet yesterday. The scheme is not quite as spectacular as it looks, because it merely confirms a four-year-old cabinet decision and has been shorn of important details such as exactly whether and even when the money will be spent.

That said, the target is grandiose: to lift public research spending to Y4,300hn a year by early next century, double the annual rate when the plan was first proposed by the government's Science and Technology Agency in 1992, and nearly 60 per cent more than this year's Y2,700bn state research budget.

Whether the agency will really meet that target is uncertain, because the tightfisted Finance Ministry will continue to control each year's research budget. Ministry officials are unwilling to release the cash without a clearer idea of the content, as yet vague, of the research programme. Yet the cabinet's approval marks the clearest official recognition to date that, for all its excellence at applied technology, Japan is behind in innovation.

Anybody visiting the research laboratory of a Japanese university can see why. Equipment is out of date, the staff are underpaid by comparison with western counterparts and industry links are almost non-existent. "Many Japanese companies find it easier to work with a US or UK university than with a Japanese institution," observes a European scientist working in Tokyo. The point is underlined by

Japan's flagship technology projects, last December's leak at an experimental fast breeder nuclear reactor and the loss in February of an unmanned prototype space shuttle, which sank in the Pacific ocean after a rope attaching it to a huoy broke. A year earlier, a scien-tific satellite spun out of orbit and plunged into the Pacific. . The Science and Technology

Agency hopes the plan will address two problems: a shortage both of quantity and quality of basic research. Japan is the world's second largest spender on research and development, \$130bn in the

current fiscal year to next March, according to official data. Yet the public sector pays only a fifth of the total, by comparison with the roughly 50 per cent of national research spending born by the US government, says the agency. The US defence budget

recent setbacks at three of explains nearly all the difference. The Japanese military, bound by a pacifist constitution, carries out very little research. Yet the German government, with a similar constraint, funds 30 per cent of its national research, points out the Japanese agency.

The Japanese government spends around 0.6 per cent of gross domestic product on research, just over half the 1 per cent or so spent by the US and Germany, it adds. More worrying, private sector research has declined in each of the past three years, for the first time since the second world war, in the general corporate cost-cutting drive

induced by the recession.

Agency officials forecast that Japan's 600,000 private and public sector researchers will dwindle to just over 500,000 in 2005, as a consequence of the country's ageing demographic profile and the unpopularity of

# Japan's low achievement in the science prize

basic research jobs. The agency highlights "low flexibility and competition" in public research institutes, which tend to be staffed by lifetime employees. Under the new plan staff will, like western counterparts, be put on shortterm contracts for the life of their project and be allowed to hold second academic jobs.

Quality of basic research is harder to measure than quantity. An agency paper bemoans the rarity with which foreign scientists quote Japanese research results, and the paucity of Japanese natural science Nobel prize winners only 1.2 per cent of the total. An even more damning verdict came from working inter-

national scientists. Of 87 young researchers from around the world, taking part in a Japanese-sponsored "buman frontier" programme, only two -both Europeans - chose to pursue their studies in Japan. The bope is that Y17,000bn will be enough to attract the best creative brains to work in Japanese laboratories.

# ILO urges | HK ruling change to on video labour law services

South Korea has been strongly

tee calling on the South Kortorship of President Sygman

unlikely the country's member-ship will be accepted.

refusal to recognise that organ-isation as lawful. Under Korean law only the

Federation of Korean Trade Unions is accepted by the government.

The ILO calls on all charges brought against Mr Kwon to be dropped and urges the government "to ensure trade union leaders are not arrested and detained for activities in connection with the exercise of their right to organise". Mr Kwon was released from prison on March 13 this year.

says the ILO report. ate steps so the KCTU is regis-tered as a trade union confed-

A presidential commission has recently been established in South Korea on industrial with the government's commitments to ILO core conventions it signed four years 200.

By Louise Lucas in Hong Kong

The Hong Kong government yesterday ended a long-run-ning industry battle by declar-ing that "video on demand". services should be subject to the same regulations govern-ing other television services.

The move comes after heavy industry and consumer lobbying which culminated in a court case, launched by Wharf Cable, the television arm of the property-to-infrastructure

company Wharf Holdings.
Wharf Cable holds the exclusive pay-TV franchise for the colony and argued the government's decision to allow Hongkong Telecom, the colony's dominant telephone services provider, to proceed with commercial trials of its own video on demand service breached Wharf's franchise. Wharf has been seeking confirmation video on demand was a broad-cast service and so subject to the same rules and regulations as other broadcasters.

Hongkong Telecom said its ambitious plans for video on demand and related services such as home banking and shopping would make it the first provider of these multimedia services as a single package, it argued that as its service was delivered down telephone lines it should merely be regulated by the Telecommunications Authority, the telecoms watchdog. Now it will be subject to the same ownership and control restrictions as its broadcasting peers, and will also have to pay royalties in respect of sub-scription and advertising reve-

Yesterday, the government further acknowledged industry complaints by agreeing to cut the rate of royalties paid by the territory's two terrestrial stations, Television Broadcasts (TVB. in which Pearson, owner of the Financial Times, has a 10 per cent stake) and Asia Television (ATV).

TVB, the larger of the two and the most vociferous in calling for a reduction, last year paid HK\$220m (US\$28m) n royalties. It has argued that the levy of 10 per cent of advertising revenues exceeds the levies imposed on monopolies such as utilities, and that far from having a monopoly it shares the market with a profusion of cable and satellite

## **ASIA-PACIFIC NEWS DIGEST**

# Singapore homes boom cools

Growth in Singapore's residential property market has slowed in the second quarter following strong expansion in the first three months of the year, UK property consultant Jones Lang Wootton said yesterday. "The private housing market, which had threatened to boil over in the early part of this year, has simmered down in the second quarter," it said in a report. The report gave no reasons for the decline, but the

Singapore government in May introduced a series of surprise measures aimed at cooling property speculation and damping prices. The report said average capital value appreciation for apartments and condominiums slowed to 3.7 per cent in the second quarter compared with 5.9 per cent for the first quarter. "Whole island average capital value now stands at \$840 per square foot," it said.

#### Australia trade deficit increases

Australia's current account deficit for May soared to a seasonally adjusted A\$2.15bn (US\$1.7bn), up from a revised figure of A\$1.97bn for April. This was the first time in six months that the monthly figure had topped the A\$2bn mark. The data rekindled memories of early 1995, when the country's deficit was regularly topping A\$2bn a month, peaking at A\$2.7bn in May 1995.

The latest figures showed merchandise exports falling by 4.3 per cent, or A\$275m in the month. Rural exports suffered a 3.8 per cent slide while non-rural exports dipped by 4.5 per cent. Merchandise imports were also lower – but by only 1 per cent, or A\$70m. But while the May deficit was larger than most private sector economists were expecting and the Australian dollar and local bond prices dipped on the news, some analysts suggested that the situation should now stahilise – albeit at uncomfortably high levels.

Nikki Tuit, Sydney

#### Manila peace plan attacked

President Fidel Ramos yesterday came under attack by Christian groups for agreeing to an autonomous zone in the south of the Philippines to be controlled by the country's largest Moslem rebel group. On a visit to Mindanao, home to most of the country's 5m Moslems, Mr Ramos was accused of selling out to the Moslem rebels 24 years after the insurgency

The deal, due to be signed at peace talks in Jakarta later this month, provides for a "peace and development council" for the southern Philippines to be dominated by Moslem officials. Mr Nur Misuari, chairman of the Moro National Liberation Front, who returned to the Philippines from exile in Sandi Arabia for the peace talks two years ago, has been invited to head the autonomous body for three years until a referendum can be held to determine the scope of the antonomous area.

Leaders of the Christian residents of the 14 provinces to be included under the accord, who claim that 50,000 people have died in the fighting since 1972, told Mr Ramos that Moslems constituted barely 30 per cent of the area's

#### Mongolian election rout

Mongolia's opposition Democratic Union Coalition won 50 of the 76 seats in parliament in final results yesterday, routing the former communists who had held power for 75 years. The ruling Mongolian People's Revolutionary party (MPRP) had yet to make an official comment on its crushing defeat, but US election observers said government leaders had given assurances they would co-operate to ensure a smooth transfer of power. The MPRP saw its 70-seat majority in the Great

Hural, or parliament, slashed to just 25.

"It's a revolution," Mr Hashbet Hulan the victorious coalition leader said in an interview. "All our polls suggested this, but we did not expect this." Reuter, Ulan Bator



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THE SERVICES CENTRE OF EUROPE

protests

Colombia'e foreign ministry

has protested strongly at what it calls US interference in

internal political affairs, warn-

ing that Washington's "incor-

rect and unjust policy" could deepen "growing anti-Ameri-can feelings" in Colombia.

The protest follows publica-

tion in The Washington Post

on Sunday of a memorandum

from Mr Myles Frechette, US

ambassador to Colombia, rec-

ommending that his govern-

ment impose sanctions against

Colombia and cancel the US

visas of President Ernesto

Samper and senior members of

his government so as to "iso-

The report of the memoran-

dum, which has not been

the Colombian city of Cali.

Last week, Ms Janet Reno

tion, although the US insists

The newest political ten-

sions have set off a debate in

Colombia about reviving

extradition, and the prosecu-

tor-general has proposed

studying a possible constitu-

tional reform to reinstate what

be calls "a valuable tool

against international drug

trafficking."
The Colombian government

communique accuses the US of

endangering democratic stabil-

ity and it rejects sanctions,

unilateral actions and "dis-

courteous statements that

US election campaign issues

and Colombia's own problems,

says the document, should not

get in the way of co-operation

wound national dignity."

against drug trafficking.

that an earlier treaty remains

late and weaken" him.

at US

policy

# Home sales increase interest rate pressure

in Washington

New IIS home sales soared to their highest level in a decade in May, increasing pressure on the Federal Reserve to signal an early increase in short-term interest rates.

The Commerce Department said sales rose 7.5 per cent to a seasonally adjusted annual rate of 828,000, the highest level since April 1996. The figures surprised Wall Street as most economists had projected a decline in sales of about 3.7 per cent in response to recent increases in mortgage rates.

In a separate report, the Cooference Board, a business group based in New York, said the index of leading economic indicators rose 0.3 per cent in May to its highest level in more than a year. The leading index is designed to predict changes in economic activity six to nine months ahead.

shortly before Fed governors and regional presidents began a two-day meeting to discuss interest rate strategy. In recent days analysts have speculated that the Fed would delay an ease in rates until its meeting in late August. By then, analysts argued, the Fed would be better able to judge whether a recent surge in economic growth posed a serious infla-

Buoyant data this week. however, may have strength-ened the hand of Fed policy makers eeeking an early increase in rates.

On Monday, the purchasing managers' index rose sharply to its highest level in 16 months, signalling a strong rebound in manufacturing industry. This followed figures showing big increases in employment, industrial production, retail sales and new

expected to show economic growth at an annual rate of about 4 per cent in the second quarter - well above the pace the Fed regards as compatible

sales indicated tha recent sharp rise in long bond yields has done little so far to curb demand for housing, one of the most interest-sensitive sectors of the economy. Rates on 30 year mortgages averaged 8.09 per cent in May, more than a percentage point higher than

# Another arrest in probe of paramilitary right

By Christopher Parkes

US federal authorities vesterday announced another arrest in an alleged paramilitary plot to bomb government buildings in Arizona, bringing to 13 the number of people

The latest arrest took place late oo Monday, sbortly after the government had held 12 alleged militia members in Arizona oo conspiracy and explosives charges, following one of the most successful reported covert actions against armed anti-government groups in the

On Monday, 10 men and two women were charged, all said to be members of the Viper Militia, and 400lb of fertiliser, similar to that used in the deadly April 1995 bombing of the Oklahoma City federal building, was seized. The move

Arizona, apparently by dissidents calling themselves Sons of Gestapo, and shortly after the surrender of a group of Montana "freemeo" at the end of a siege by federal agents. The arrests followed a six-

month investigation during which a state police officer is understood to have infiltrated the group and gathered information on meetings and secret training in the desert with home-made bombs.

As well as the explosive chemicals, and three unregistered machine-guns, arresting agents seized a videotape showing how best to place charges to ensure a bombed building's collapse.

Mr Raymond Kelly, Treasury under-secretary for enforcement, said on Monday some search warrants had not yet been fully executed, "so it's possible there could be more arrests".

The indictment, unveiled in Phoenix, also included alleged

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IND' EUROPE

with stable inflation. Yesterday's data on home

in January.

The rise in the leading index for a fourth consecutive month indicated the economy was likely to remain strong for the rest of this year. The main componants pushing up the index were increases in sensi-tive materials prices, a longer factory working week and higher orders for plant and

home-made rockets powerful enough to destroy a police car, and the need for explosives "to take out tanks in the upcoming war with the government."

Ms Janet Napolitano, federal prosecutor responsible for Arizona, said the Viper members were suspected of havingplanned to blow up half a dozen buildings including the Phoenix police department headquarters and buildings housing the Federal Bureau of Investigation and the Internal Revenue Service.

The Viper Militia was unknown to most Arizonans before Monday's arrests, but the state is home to several dissident groups. Most are rightwing, self-styled white supremacist or "patriot" gangs. Prominent individuals in the milieu include several police officers, according to the Anti-Defamation League, an arm of the Jewish organisation B'nai

# Colombia Republican standard bearer alleges pro-Democrat bias Dole snarls at TV networks

By Jurek Martin in Washington

Mr Bob Dole yesterday charged that TV networks in the US may be violating laws "by always sticking up for Democrats".

In a testy morning TV interview, the presumed Republican presidential candidate suggested that the media and the Democrats had deliberately taken out of

necessarily eddictive. "I've said I don't know whether it's addictive, I'm not a scientist," Mr Dole said. But, he went on, "are we going to regulate everybody's adult life? Adults

context comments in which he bad

implied that cigarette smoking was not-

ought to be free to make choices."

The tobacco industry was "in a legal business" and it was "hypocritical" of the Democrats, who had accepted money from tobacco companies, and of their allies in the "liberal clite" media to suggest that he was in their pocket.

"Only people like you in the media don't question the Democrats and how much money they receive." he said Implying clear collusion, he said the networks could be in violation of Federal Communications

Commission laws on political neutrality in broadcasting.

There is nothing new in the Republican conviction that leading media organisa-tions are tilted towards the Democrats. But the refrain has been picked up with vigour over the last two weeks.

Mr Dole himself does not enjoy close

relationships with the reporters covering his campaign, their access to him being limited. That has resulted in some fairly cool reporting of his efforts to date.

That may be contrasted with Mr Bill
Clinton's serious attempts to court the media during his presidential campaign in 1992. These, Republicans believe, helped to insulate Mr Clinton from the assorted allegations related to the Whitewater affair and to personal matters that, at various times, threatened to undermine his bid for the White House.

Three and a half years in the presidency, however, have cooled any romance between Mr Clinton and the press, with his re-election campaign now subject to a degree of scrutiny certainly equivalent to

that directed at Mr Dole.

The latest round of opinion polls still

shows the president with a healthy lead, A Washington Post/ABC survey, published resterday and conducted late last menth found it down to 14 points, from 22 in mid-May, mostly because of Whitewater and other allegations. But another national survey, which had given Mr Dole hope with its report of a six point deficit a month ago, now puts the gap at 18 points Mr Dole is also still fighting controvers over his stance on abortion. On Monday, he appealed to moderate Republicans by stating he could accept a vice presidential running-mate who was not pro-life and yet again ran into a buzz-saw of outrage from

religious and cultural conservatives.

Asked by a TV talk show host if a prospective vice president's position on abordition would be a major factor in his choice. Mr Dole said defiantly: "Not to mine. To others it might make a difference, but I'm the nominee.

He even said he had no problems with the pro-choice beliefs of Governor Chris-tine Todd Whitman of New Jersey. However, she issued a statement praising Mr Dole's stand but reaffirming she did not want to be a candidate.

# Test for Chile's central bank

dum, which has not been denied by Washington, follows an unprecedented deterioration in US-Colombian ties over the past year, amid charges that Mr Samper's presidential election campaign in 1994 was partly financed by drug traffickers of the cartel based in Resignation of chief raises autonomy questions, writes Imogen Mark

central bank president last week after a US attorney-general, requested the extradition of four top Colprolonged struggle within the board of directors has cast ombian drug traffickers. The Bogotá government rejected doubt on the extent of the the request, on the grounds that extradition was banned by Colombia's 1991 constitu-

bank'a autocomy. Mr Roberto Zahler, who had been due to leave in December when his five-year term expired, announced his resignation on Friday, after banking business had closed for the weekend.

His brief statement referred to "situations in recent months" which made it impossible for him "to continue leading the central bank according to what I think are basic principles'

Mr Zahler has not elaborated on his statement.

He worked closely with the previous finance minister, Mr Alejandro Foxley, but was known to get on less well with the present minister, Mr Eduardo Aninat. Mr Zahler had publicly criticised the government's reluctance to cut spending, though both

ministers had run steady fiscal

surpluses.
The central bank's institutional role is to guide monetary policy, and Mr Zahler made it his personal mission to hring down inflation gradually but steadily, which he has succeeded in doing - from 27 per cent in 1990 to 8.2 per cent last year. This year's target of 6.5 per cent looks just about within reach.

But though the government agrees on the overall aim there have been public differences about whether or how much growth should be sacrificed in the anti-inflation cause. In April, the two central

criterion



President Eduardo Frel: He is expected to name soon a new bead of the country's central bank

Pifiera and Mr Jorge Marshall, the vice-president, are believed to have voted against Mr Zahler on a new round of interest rate rises.

All the central bank directors are appointed, for varying terms, by the president, with some consultation with the opposition. The political balance now favours the governing coalition, with three of the five having been appointed after Chile's return to democracy. Mr Zahler himself is a Christian Democrat, but was named at the end of tha military government, when technical excellence was the overriding for the

then-opposition candidates. bank board directors closest to The real sticking point on central bank had no means of to mai the government, Mr Pablo the board, however, has been pressing for repayment, autonomy.

the long negotiations over repayment of old bad debts owed to the central bank by five local banks. These date back to ball-out packages arranged during the bank crisis of 1982-83, when much of the banking system was technically insolvent.

-At the end of the military of the debts was changed to allow the banks to put them off the balance sheet, as subordinated debt, with no term for repayment. The aim was to make sure that the government could not use the debts as an argument for nationalising the affected banks.

. But it also meant that the

beyond a percentage of annual earnings. Relations between Mr Zahler and some of the debtors, particularly the Banco de Chile, until recently the biggest private bank, became

very strained. The previous and the present government opted to liberalise the banking law in exchange for setting new rules for the debt repayment. By the time the rules were agreed last year, most of the banks had chosen to repay their obligations. Only the five most heavily indebted, including the Banco de Chile and the Banco de Santiago,

The central bank board has been negotiating new terms with each of the five in recent : weeks, and reached firm agreements with two including Banco de Chile. But Mr Zahler had apparently held out for tougher terms, while Mr Marshall is said to have argued for a softer position, to get the issue out of the way once and for all. Mr Marshall's position carried the day in the board, and Mr Zahler resigned.

The government and the central bank expressed formal regret at his departure and paid tribute to his professional competence and dedication. The government and the board restated their commitment to maintaining tha bank's autonomy, and to the economic

programme for 1996. But the real test of how independent the government will allow the central bank to be will come when President Eduardo Frei names...Mr Zahler's successor, within the next few days. The new bank president will have to possess both a strong character and considerable negotiating skills maintain effective

\$50m embezzlement charges levelled at treasurer of national agency

# Welfare official held in Mexico

By Leslie Crawford in Mexico City

The treasurer of Mexico's Social Security Institute (IMSS) has been jailed on charges of embezzling 360m peacs (\$50m) from the agency, which han-dles the pensions and savings of more than 9m Mexicans. Mr Carlos Tomás Peñaloza Webb, the treasurer, was accused late on Monday of havwith the alleged connivance of to bank accounts which Mr two employees of a Mexican Penaloza Webb held in the US.

According to Mr Arsenio Farell, Mexico's comptrollergeneral, Mr Peñaloza Webb authorised numerous stock market transactions during 1994 and 1995, which generated huge profits for the brokerage bouse and respective losses at the treasury of the IMSS.

The brokerage's profits were then, it is alleged, transferred

He is the first senior civil servant to be jailed on charges of corruption under President Ernesto Zedillo'a government.

The move is expected to help the president in his drive to reform the IMSS, which operates a mammoth bureaucracy with more than 300,000 employees and a budget bigger than that of Pemex, the state-owned oil monopoly and

This year, the Mexican Congress approved a bill to privatise the country's pension fund

Under pressure from nationalist politicians, however, a role larger than expected role was reserved for the IMSS. which will be allowed to set up its own company to run pen-sion funds and thus to compete with private-sector financial

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# Caracas sees inflation fall

By Raymond Colitt in Caracas

zuela's monthly inflation rate fell in June to 7.1 per cent from 12.6 per cent the previ-ous month. It was the first fall since March this year.

The government has forecast that monthly inflation will fall steadily to 2 per cent by yearend. However, analysis say a recently approved sales tax increase from 12.5 to 16.5 per cent and expected utility rate rises will add to inflationary pressure in July and August. The government in April implemented austerity measures that included a sevenfold petrol price increase and resulted in a 40 per cent depre-

ciation of the national currency, the bolivar. Inflation for the past 12 months now stands at 108.1 per cent, compared with \$1.2 per cent for the previous 12 months. Mr Luis Berrizbeitia, execu-

tive director of the Internative director of the Interna-tional Monetary Fund, said: to Colombia, \$62.5m to Ecua-"The inflation rate of June is dor and \$37.1m to Peru.

behaving practically according to what was estimated under the macroeconomic stabilisation programme." He expected mentally inflation to be about 1.5 per cent by year-end.

 The Andean Development Corporation (GAF) this week granted Venezuela a \$200m loan to help support and restructure its banking sector. The six-year loan will be disbursed in two tranches later this year and carries an interest rate of 2.45 per cent over Libor. The CAF said: "This is the most important CAF loan to Venezuela and the first multilateral credit approved to belp reform Venezuela's financial system".

Venezuela expects additional loans of up to \$400m each from the World Bank and the Inter-American Development to reform its banking sector. Rescuing the industry in 1994 cost more than \$7bn. The CAF

# IBM sues over job in Argentina By Matthew Doman

IBM, the US computer giant, yesterday began legal action against Argentina's stateowned Banco Nación, seeking payment for work already done oo a controversial \$249m computer installation contract recently cancelled by the bank.

The contract is the subject of a criminal investigation which has led to the indictment of 30 IBM staffers and Argentine government officials accused of having defrauded the bank and the state. Banco Nación cancelled two weeks ago the contract to install computers serving its 525 branches, citing "the impossibility of completing the contract'e objectives". IBM said yesterday that it would seek payment for work

performed, costs incurred and other unspecified damages arising from what it called the bank's "wrongful revocation" of the contract. IBM Argentina has worked

and to meet Banco Nación's changing requirements," said Mr Wilmer Guecaimburu, president of IBM's Argentine operations. He said IBM would have preferred an "amicable agreement" with the bank, but Nacion's annulment of the contract had left it with no alternative but "to go to court to protect our legal rights". IBM, which is seeking dam-

ages of \$86m, claims Banco Nación failed to carry out its obligations under the contract and improperly changed technical requirements, making it impossible for IBM to fulfil the contract. The bank made no comment on IRAC's legal action. The indictments of senior

IBM staff members, virtually the entire bank board and several other officials in April followed a six-month investigation into allegations that bribes were paid to win one of the biggest information tech-nology contracts in Latin American mainess history.

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Service - Service

Mars wins

court fight

over hat

messages

The men and

unfortunate

exclusive rights for organising the sponsorship of the tourna-ment, an undisclosed sum in legal fees as a result of an unsuccessful court action in London to have them banned. ISL was yesterday still licking its wounds from the court-room scrap with Mars, one of the sponsors of the tournament, whose "Snickers" logo together with England's St

George's cross were prominently displayed on the hats. ISL argued that Mars had violated the principle of "equality of branding on site" accepted by all the tournabley stadium before all the main matches. Coca-Cola is thought to have led earlier complaints by other sponsors

"We felt that equality was a fundamental issue at the beart of the spousorship we sell," Mr Tom Hipkins, ISL's senior counsel, said yesterday in Lucerne. "It would be unfair to characterise this as a Coke/ Mars issue. It was the subject of concern for other sponsors.

Mars was unrepentant yesterday. "We believe we were doing nothing wrong and that the court case was unnecessary." Mr Steve Clarke, the company's events marketing manager said yesterday.

The company argued in court that there was nothing in its agreement with ISL prohibiting the sale of plastic bowler hats in and around Wembley stadium Under-ground station. Mars added that it had obtained a licence to sell the bowler hats from the local council.

ISL and Mars are contractually bound to work together in the 1998 World Cup in France. "We bave to organise ourselves in such a way that we can preserve equality in the future," said Mr Hipkins.

#### Profit of \$1.8bn expected on 1993 account By Raiph Atkins, Insurance Correspondent tion, highlight the turnaround at the insurance market which pay towards the cost of Equi-Lloyd's of London will next has reported losses of more week mark the end of five lossreports three years in arrears. making years by reporting a

£1.18bn (\$1.8bn) profit for the But Chatset warned that "illfeeling" could be created by 1993 account, according to estibenefits for Names underwrit-ing in 1993 resulting from the insurance market's recovery plan. Names are individuals whose assets have traditionally LLOYD'S OF LONDON mates yesterday. They

supported the insurance marsuggested that there would As part of the plan, Lloyd's also be an additional £400m is setting up Equitas, a hig reinsurance company which bonus for Names underwriting will take responsibility for bil-The estimates by Chatset, the Lloyd's analysis organisa hons of dollars of mainly US

asbestos and pollution liabili-

tas. But the high level of finanthan £80n since 1987. Lloyd'a cial reserves held during 1998 means that those underwriting will receive a £400m release.

Chatset warned that the extra funds might cause resentment among hadly affected Names who could not afford to continue underwrit-ing in 1993. It also suggested that the distribution to 1993 cated to strengthening the

reserves of Equitas.
Lloyd's said "rough justice" was inevitable under the plan. It pointed out lossmaking Names would benefit from a

the plan. Equitas offered a cost-effective way of capping Names' liabilities, allowing them to leave Lloyd's. Chatset acknowledged that the recovery plan "is pretty attractive for most Names".

The 1993 profit figures reflect the turnaround in the international insurance business after a bleak start to the decade. Chatset estimates returns on "capacity" - the amount of business Names are able to underwrite - were as high as 20 per cent on marine business, before taking account of the

twice as high. In 1994, Lloyd's is expected to have made a further £1bn profit. The following year's

profits were affected by a

downturn in motor insurance premium rates but are still expected to reach about However, this year's figures could mark a significant deterioration. A survey released yesterday by the London Insurance and Reinsurance Market Association, representing non-Lloyd's insurance companies in the UK capital,

showed premium rates for

continuing to fall. That could put pressure on profit margins across the market Mr Stephen Riley, chief

executive of Swiss Re (UK), said premiums "are about to cross the murky water between what is just about an acceptable commercial rate and an unacceptable rate".

 Lloyd's confirmed it could set up a separate reinsurance company to take over the liabilities of US Names if it was prevented by state securities regulators from offering Equitas cover in the US. A Lloyd's insider described the option as a "contingency plan".

#### UK ECONOMICS DIGEST

# World Service changes opposed

have written to every governor of the BBC warning that, if current changes go ahead, the World Service would first "alienate its audience, then lose them". The warning came in response to the reconstruction of BBC management under which World Service programmes would in future be made by other divisions of the BBC under cootract.

The campaign argues that the plans would end the cross-fer-tilisation that occurs because World Service staff who broadcast in English and those who produce the 43 other language services are all in the same building.

The aspirations of BBC journalism can be taught to the

newcomers just as we rely on them to belp us understand their cultures," the letter argues. The Campaign insists that there is no need for the World Service to be subsumed into a restructuring intended above all to bring benefit to British television audiences, particularly as the World Service is cheaper in every area than any other part of the BBC.

#### Focus on communication

The National Heritage Department should be renamed the Department of Communications and Heritage and its role strengthened and extended to include communications and the information superhighway, MPs recommended yesterday. A report by the national heritage committee of the House of Commons argues that allocating responsibility for developing the superhighway to one of seven junior ministers in the Department of Trade and Industry gave it nothing like sufficient weight. Responsibility for horse and greyhound racing should also be transferred from the Home Office to the renamed department, as should responsibility for the BBC World Service which at the moment is beld by the Foreign Office, the MPs said. George Parker, Westminster

#### Subsidy for N Ireland utility

The government yesterday announced details of a £16m (\$24.48m) subsidy for Northern Ireland Electricity, the privatised utility. It represents the first tranche of a £60m programme over 3 years, to offset the rise in electricity prices in Northern Ireland, which are around 23 per cent higher than the UK average.

The move to provide support to a privatised utility was cantiously welcomed by Offer, the Northern Ireland electricity regulator, and follows a critical report last December from the Commons Northern Ireland committee. The price subsidy announced yesterday will be paid to NIE to reduce tariffs by around 3 per cent, bringing the current electricity price rise down to around 2.3 per cent for 1996-97. John Murray Brown, Dublin

#### Trico to expand Welsh plant

Trico, a US-owned motor components company, is to create 150 jobs in a £5m (\$7.65m) expansion at Pontypool, south-east Wales. The company, which has been at Pontypool since 1992, has an existing workforce there of 435 people. It is increasing production after reaching a distribution agreement for its wiper blades with NGK of Japan. The expansion, which has grant support from the Welsh Office, will also enable Trico to diversify its range of products. Roland Adburgham, Cardiff

#### Jersey to protect partners' assets

The partners of Britain's leading accountancy firms will now be able to protect their personal assets from big law suits by registering their partnership in Jersey. The island's parliament yesterday voted by 25-19 to allow limited liability partnerships to be established on the Island

Under the new law firms are still liable to be sued, as are negligent partners, but the assets of the rest of the partners are safe. Two substantial UK firms, Ernst & Young and Price Waterhouse, helped the Jersey authorities draft the law and

both are enthusiastic about taking up registration.

There is strong pressure on the UK government to allow limited liability partnerships in the UK. The Department of Trade and Industry is looking at a wide range of options on professional liability. The Jersey legislation follows similar laws passed at state level in the US.

Philip Jeune and Jim Kelly

#### Machine tools deticit

Britain experienced a hig trade deficit in metalworking machine tools in the first quarter of 1996, after a surplus in the equivalent period a year earlier, says the Machine Tool Technologies Association, the main trade body for the industry. The change to a deficit in the first three months of this year of £32.9m (\$50.33) from a surplus of £5.6m in the equivalent period a year earlier was caused mainly by a large rise in imports. For the whole of last year, machine tools recorded a deficit of £121.6m compared with a surplus of £17m in 1994. Machine tools have slipped into deficit partly as a result of large investment programmes in UK industry.

Peter Marsh, London

# One-day strike at offshore yard

Discussions are under way to resolve a dispute which on Monday triggered an unofficial one-day walkout by 900 work-ers from Amec Process and Energy's offshore fabrication yard at Wallsend in north-east England.

The unofficial strike was the first industrial action at the site, which employs 2,500 workers, since radical changes in pay and conditions were agreed nearly a year ago. Over the past year the facility has won orders worth around Chris Tighe, Newcastle upon Tyne

# 'French' climate ahead for London, say scientists

By Clive Cookson, Science Editor

Global warming will widen the UK's climatic gap between the wet north and the dry south, a government review of climate

change warned yesterday. The UK Climate Change Impacts Review Group, an independent scientific panel reporting to the Department of the Environment, predicts that the north and west of the country will become even wetter over the next half-century.

with more flooding.
The south and east will become drier, with frequent droughts. The climate of the London area in 2020 will be like that of the Champagne or Loire regions of France today; by 2050 it will he like Bor-

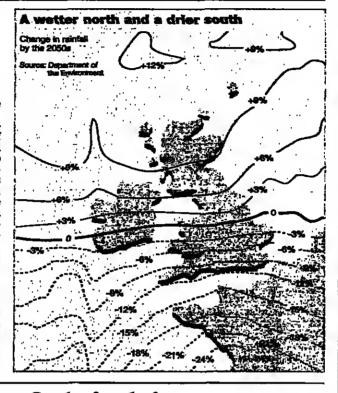
Mr John Gummer, environ-ment secretary, attacked "sceptics who refuse to believe the evidence before them". He said that, at a UN-sponsored conference on climate change in Geneva next week, he would call for further cuts in the emissions of "greenhouse gases" – mainly carbon dioxide from burning fossil fuels – by developed countries. UK emissions are expected to be between 4 and 8 per cent below

1990 levels by 2000, he added. Professor Martin Parry of University College London, who chaired the review group, said some sectors would bene-fit from the climate changes but a larger number would lose ont. Likely beneficiaries include: tourism and recreation; forestry (with a pre-

imland regions. There is a longer list of losers. Farmers in most of England will suffer from soil erosion and reduced crop yields. Wildlife will find it difficult to adapt as climate zones move northwards by 200km

over the next 30 years. There may be new human health problems, for example if insectborne diseases become established in warmer conditions. The insurance industry is vulnerable, the report says. Drought-related subsidence, storms and flooding will all

cause more insurance claims. The review predicts an increase in the UK average temperature from 9 deg to 10.6 deg by 2050. At the same time, the global sea level will rise by



# **Brussels warns** of threat to regional funding

By Richard Wolffe

withdrew from closer Eurobean union. Alongside a stinging attack

on government policy towards the European Union, Mr Graham Meadows, director of regional policy at the Commission, said the UK's opposition to a single currency was likely to deprive struggling areas of industrial support.

Speaking at the national con-ference of the British Chambers of Commerce, Mr Meadows suggested the UK would be excluded from "flanking pol-icies" designed to help member states move towards a single currency. Those inside a single currency would not allow the UK "to steal their benefits", he

His attack on British policy was echoed by Mr Geoffrey Martin, head of the European Commission office in Great Britain, who condemned Conservative Eurosceptics for wanting to stop closer union and return to the days of the common market. together, the policies of Euroscepticism are tantamount to withdrawal from the European Union and are fundamentally at odds with the wishes of the 14 other member states," he

However Mr Ian Lang, the

chief industry minister, robustly defended the govern-ment's position, stating that a The European Commission single currency was not cen-warned business leaders yes-tral to the single market even ment's sponsors hy terday that regional funding though a straw poll among del-distributing hats near Wem- would be jeopardised if Britain egates revealed overwhelming support for monetary union. He said: "As far as we are

concerned the single market is the most important component of our economic activity in Europe, and that does not require a single currency. Mr Lang also criticised Labour's policy of devolving power to the regions, arguing that inward investors would be discouraged by the concept of a "Europe of the regions"

"The way forward is a Europe of nation states, with their own, vigorous, distinctive and outward-looking regions," he said. "The regions of England are not regions of Europe, and nor are Scotland, Wales or Northern Ireland. They are parts of the enterprise centre of Europe - the United Kingdom.

· A small majority of UK exporters are opposed to a single currency, a business survey reports, our Reonomics Correspondent writes. The survey by NCM Credit Insurance and the Institute of Export shows that 48 per cent of companies questioned were opposed to a single currency operating in the European Union with only 43 per cent in favour. But the balance has shifted in the past year in favour of

#### Quality of drinking water too low, say EU officials By Jane Martinson month for allegedly supplying the Earth, the environmental contaminated water. The court campaign group, which took its own action against the gov-

and George Parker in London

Drinking water in the UK came under attack from the European Commission yesterday as the British government itself took a privatised water company to court over contaminated supplies. -

In a highly embarrassing move for the government the European Commission has referred its evidence on levels of pesticides in UK tap water to the European Court of Jus-

At the same time as "rigorously defending itself, the UK's Department of Environment announced it was to take South West Water, one of the UK's nine privatised water

proceedings stem from an incident last year when 575 people experienced stomach nosets and abdominal pain caused by an outbreak of the illness cryptosporidiosis.

The Commission said it had found evidence that the UK had failed to comply with the 1980 Drinking Water Directive by allowing the level of pesticides in drinking water to exceed 0.1 microgrammes per litre. Certain areas, including London, were regarded as the worst offenders. Fines can be imposed on the government if it is found guilty of noncompliance after a legal case which could last three years. The Commission's action

that, after losing a Court of Appeal hearing against the government at the end of 1994. the group was refused permission to go to the House of Lords as the highest court of appeal.

The Department of the Envi-

ronment said the Commission's action had "nothing to do with water quality", but concerned legal undertakings given to companies at privati

ernment. It claimed that under-

takings given at water privati-sation in 1989 allowed the

water companies to flout the

Friends of the Earth said

rules on pesticide limits.

# **Executives 'were underpaid'**

Yorkshire Water, widely criticised over its handling of last year's drought, declared yesterday that its executives were underpaid, David Wighton writes at Westminster. MPs reacted with astonishment to a statement in the company's annual report that its "previous remuneration terms were not competitive". Mr Frank Dobson, shadow environment secretary, said: "When I first heard it, I

thought it was a sick joke. It turns out to be the even sicker truth." Ms Helen Jackson, MP, chair of the all-party parlia-mentary water group, said: "I cannot believe that they

all the reviews of what went wrong last year, nobody said one of the problems was that the directors were not paid

The annual report, now being posted to shareholders, discloses that the former chairman and chief executive, who both stepped down in May, received total pay of £170,000 (\$260,000) and £156,000 last year. The company said it had reviewed remuneration in line with the recommendation in last year's Greenbury report on executive pay.

The remuneration committee of non-executive directors concluded top salaries were too

recent experience of recruiting two executive directors from Mr Kevin Bond, former chief executive of the National Riv-

ers Authority, received a large rise when he joined Yorkshire last month as head of the Water husiness on a salary of about £130,000. Yorkshire also managed to

recruit a heavyweight new non-executive chairman in Mr Brandon Gough, former senior partner of accountants Coopers & Lybrand, who agreed to take on the two-day a week job for a salary of £120,000. The company said it believed the new

# **OBITUARY**

It is with deep regret that we have to announce the death on June 29th 1996, as a result of a tragic accident, of the longserving Chairman of Veba Oil Operations B.V.,

#### Mr. Salem A. Farkash

Mr. Farkash was 60 years old. He had been Chairman of Veba Oil Operations since 1980. With enormous commitment he played a decisive role in the development of Veba Oil Operations into one of the leading oil companies in Libya and led the company with great skill through a difficult period.

His distinguishing characteristics were not only great experience, an understanding of people, a marked sense of responsibility and dependability, but also his untiring work for the company and its

It is with profound gratitude to Mr. Farkash that we take our leave of him. We shall honour his memory.

Veba Oel AG

'Cheaper' commuter fleet renewal proposed while pressure mounts to reroute freight line

the single currency project.

# Train manufacturer offers modernisation deal

By Charles Batchelor, Transport Correspondent

Up to 2,000 ageing commuter trains could be modernised for a quarter of the cost of building new ones and given a further 15 years of life under proposals launched yesterday by a rolling stock manufacturer.

Mr Stig Svärd, chief executive officer of ABE-Daimler Benz Transportation (Adtranz). said the proposals meant the newly privatised train operating companies would be able to

afford to upgrade their fleets at an acceptable cost. Rolling stock manufacturers

are placing increasing hopes in

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orders for new ones. It is nearly three years since a new train order was placed in the

Mr Svärd said modernisation would cost about £250.000 (\$382,500) per carriage - for the type known as Mark 1 - compared with £1m for a new one, although rail industry managers said this costing was opti-

Adtranz would take 25-year-old rolling stock and replace the steel bodies with aluminium, on top of the original wheels and underframe. The new trains would have crumthe prospect of refurbishing ple zones to absorb impacts

old trains because they do not expect a significant volume of orders for new ones. It is slicing through each other in a crash. "Slam" doors would be replaced by electric doors and interiors would be redesigned with safe, fire-proof seats. A decision to go ahead with

Adtranz's proposed modernisa-tion would depend on the train operators and the rolling stock leasing companies jointly agreeing to finance the upgrading. The leasing companies would extend the life of their assets and could charge the train operators slightly more for leasing the trains.

But the increase in charges would only be "marginal," Mr Svärd said. In part this would be because the rolling stock companies are rewarded for making safety improvements by the government. Most of the Mark 1 trains

run south of the river Thames with 540 operated by Network Sonth Central, recently acquired by CGEA, a French transport group; 440 by South West Trains, now part of the Stagecoach bus group; and 350 by South East Trains, which has yet to be sold.



group of mnnicipal authorities in London is step-ping up its campaign to reroute Channel tunnel freight trains away from the centre of the capital on to an under-used line running to the south-west of London, Charles Batchelor

The activities of the London Channel Tunnel Group bave been given additional urgency by proposals for a dedicated right route to be built partly in tunnels under London and

capital. A Department of Transport assessment concluded that improving the line was not a viable option. But this study did not take account of the problem of capacity constraints and put too high a price tag on the work which needed doing, the tunnel group said. "The relative success of the Channel tunnel rail freight activity is already snggesting that capacity cou-

straints will soon become a

by growing congestion on

problem," the group added.

The Board of Management, Works Councils and Employees

A Transfer

Maria Maria -File Street Street

Caspar Henderson on the potential

offered to developing countries

# The solar revival

Rumours of the stillbirth of the solar industry have been much exaggerated. Nevertbeless, even its most optimistic supporters admit that it has failed to generate in two areas where

its potential ought to be greatest. In large plants supplying power to national grids, and stand-alone schemes for the more than 2bn people who do not have access to a grid, electricity produced by photovoltaic (PV) cell technology has until recently not been considered feasible without subsidy, or at least the removal of subsidy from rival generation technologies.

But this perception could be about to change. Where communities are more than a few miles from a national grid, PV systems can already provide the most costeffective solution for basic energy needs. "The barriers are no longer technical," says Jenniy Gregory of the UK consultancy IT Power. "The problem is attracting capital."

in a book\* to be published this autumn. Gregory writes that successful models for standalone solar power projects already exist in the Dominican Republic, Honduras, Sri Lanka, India and elsewbere. in virtually every case, though, international seed funding was essential.

But, she says, more local use of hire purchase, revolving loan schemes and other financial innovations could turn the current trickle of projects into a flood.

The experience of a remote small village in Sudan's North Kordofan province shows what can happen. After the World Health Organisation installed a PV system to keep vaccines cool at the village clinic, elders placed a small tax on sugar production. Within a few months, they had raised enough to buy a solar-powered cooling system for the mostage.

the mosque.

As for big, commercially competitive solar power projects, two recent agreements suggest such schemes are in sight for two countries, India and China, that are among the hungriest in the world for energy. In

India, the Rajasthan State Electriclty Board bas signed a 25-year power purchase agreement with Amoco/Enron Solar for power from an array to be pumped directly into the grid. Construction is scheduled to begin soon on a plant in the Thar Desert for supply of 50MW in the first instance and possibly 150MW in subsequent years.

in China, Amoco/Enron has signed an agreement with the State Science and Technology Commission for a joint feasibility study for a solar cell manufacturing centre and 150MW generating facility.

and 150MW generating facility.

"We think there is a great big market out there and we are going for it," says Bob Kelly, executive vice-president of Enron and co-chairman of Amoco/Enron Solar, a joint venture between Amoco, the US oil company, and Enron, North America's largest natural gas company.

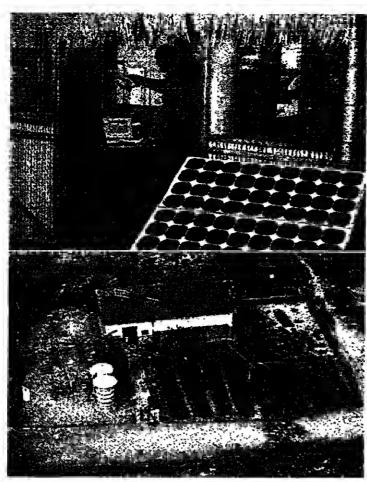
while the Rajasthan project will meet only a tiny fraction of India's energy demand, it could set an important precedent for solar power to a national grid at truly competitive prices. With India's economy apparently in the early stages of "take-off" (GDP grew by about 6 per cent last year, energy use by 7 per cent) and a population projected to overtake China's, choices made now

will reverberate far into the future. As in other rapidly growing countries, energy use per dollar of GDP in India is high compared with the US and western Europe, So, until there are greater incentives for energy efficiency, enormous amounts of power will be needed to fuel growth.

A recent study by Kleinwort Benson said that maximising domestic coal atock use and minimising expenditure on foreign oil and gas would make the best economic sense for India. But the study does not account for the cost to the environment and Indian society of fossil fuels used on the predicted scale.

Asia's emissions of sulpbur diox-

Asia's emissions of sulpbur dioxide will easily surpass those of Europe and North America combined by 2000. Its emissions of carbon dioxida will overtake the west no later than 2015. Coal is the biggest source of both. Photovoltalc



A model of a solar-powered bamboo home (top) and a working PV system in Brazil

technology can deliver power virtually without pollution and without beavily burdening the balance of payments of a country that has to import fossil fuels.

nlike large-scale hydropower projects, It is seldom likely to cause severe disruption. Damage to the ecology of desert regions that suit solar arrays hest is unlikely to be significant, and few people live there. Bhatron Singh Skekhawat, Rajasthan'a chief minister, estimates the state could easily generate 10,000MW of solar power. Finance for the Rajasthan lant, which could cost about \$100m (£64m), has yet to be finalised. A proportion of the equity capital will come from Amoco/Enron itself. Kelly says the company is still negotiating with the Global Environmental Facility, a fund set up after the Earth Summit in Rio in 1992 and administered by the World Bank to encourage initiatives miti-

those of the west to the bigtovoltalc

bur dioxgating greenhouse gas emissions.

The Indian Renewable Energy
Development Agency, or IREDA,
could be among those providing some backing. The existence of the agency – hailed internationally for the success of the revolving fund it

operates for renewable energy projects – is indicative of an outlook that has put India on the road to becoming the first country outside the OECD with large-scale solar power at commercial rates.

Renewable energy technologies are set to boom in India, according to Vijay Bakthvatsalam, the agency's director. By 2015, he estimates, tha country could have 16,000MW on line - or 8 per cent of total generating capacity.

generating capacity.

But the agency remains cautious about the role of solar power in the total remewable energy mix. Although it agrees that solar has by far the greatest potential in the long run, it envisages only 10MW-15MW coming on line in the country each year until 2015. The next few months in Rajasthan could determine whether a very different scenario emerges.

\* Financing Mechanisms for Renewable Energy Systems: A Guide for Development Workers. Jenniy Gregory. To be published by IT Publications (Tel +44 (0)171 436 9761) this outumn.

Previous articles in this series appeared on June 5 and 12.

Viewpoint · By Ronald McLean and Jonathan Shopley

# Green light shows for corporate gains

Dow Chemical aims to show that investment can bring high returns

When Dow Chemical announced recently that it planned to invest \$1bn (£645m) in new environmental equipment and programmes during the next 10 years, the real news was not the size of

grammes during the next 10 years, the real news was not the size of the proposed expenditure but the company's prediction that it would make a return of between 30 and 40 per cent on its investment.

For several years observers in

the business community have been saying that companies can enjoy tangible gains from environmental initiatives. But solid evidence of these benefits – the kind of proof that wins the confidence of corporate decision-makers – has been slow in coming.

A recent survey by Arthur D. Little, the international consultancy, found that companies often face a barrier between their business sctivities and environmental functions, which stope them realising any associated benefits. Of 185 North American companies surveyed in a range of industries, only 4 per cent reported that they treated environmental issues as a fully-fledged part of business management.

More than 70 per cent said the main obstacles to progress on such issues were the separate professional culture of environmental management and the inability of business managers to see environmental management as a business issue.

These companies are contending with a corporate "split vision". The business vision is active and postive, focusing on growth and profitability, but the environmental one is passive and negative, concerned with satisfying regulators and appeasing environmentally-conscious customers and pressure groups. Because of this split vision, companies often perceive environmental actions as barriers

to business growth, not opportunities for success. The good news, as companies such as Dow are showing, is that the split vision is not inevitable. Those that bring together their environmental and business visions may gain substantial bottom-line results.

Xerox, for example, launched a programme in 1991 to lower costs ecross its product life cycle. Partly in response to proposed product take-back legislation in Germany and other parts of Europe, it explored relevant activities, including product recovery, disassembly, and remanufacturing or recycling. It discovered that its copiers had considerable residual value — in numerous components that last far longer than the product as a whole. As long as the company simply allowed old copiers to be

disposed of, that value was lost.

After Xerox launched its takeback initiative to recapture and
remanufacture parts for use in
new products, it achieved almost
immediate results. In its first year,
the initiative increased the company's net earnings by \$50m as a
result of lower manufacturing and
raw material costs and reduced
inventory charges, Recent calculations put the initiative's total contribution at about \$200m for a

three-year period.

For Baxter international, packaging is one area where a combined focus on business and environmental goals is winning benefits. After a task force was set up by the company's cardiovascular division to reduce the per-unit weight of packaging by 15 per cent, it looked for options that cut packaging and cost without raising prices or inconveniencing customers. As a result, one material was replaced by another that eliminated the need for one layer of packaging and was more easily recyclable, saving \$2m annually.

Bristol-Myers Squibb is getting sustained results conducting lifecycle reviews of all existing products and expects to complete the process, which began in 1992, by 1997. In each review, an employee team representing a range of business areas and skills use product lifecycle analysis tools to identify environmental advantages and cost savings. To date, with more than half the reviews completed,

Bristol-Myers Squibb has Identified average savings of \$300,000 on each

Despite success stories such as those, many corporations continue to question whether such performance gains can be repeated or sustained. Examples abound of anvironmental initiatives that began with n great fanfare and then fizzled out.

One critical factor is building management support by proving the environmental initiative will work. Despite conventional wisdom, many successful programmes did not start with senior management support driving them. Instead, they demonstrated success in one business area, then used those results to interest senior management and spread the programme through the company.

gramme through the company.

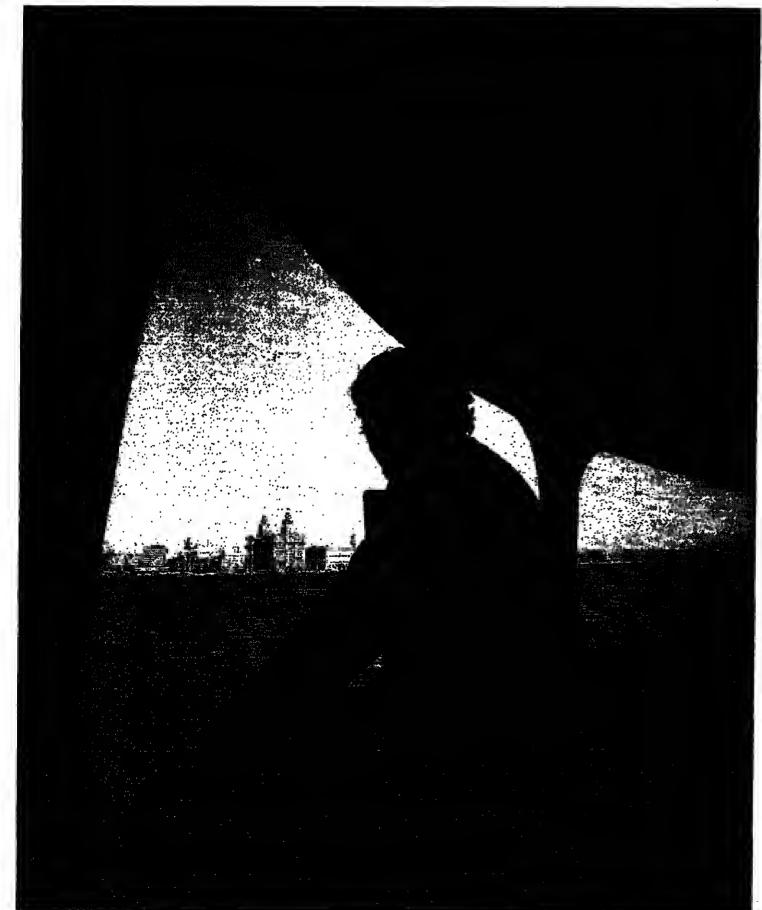
It is equally important to recognise and address how much environmental managers have worked in isolation from business concerns. Even the best managers—trained in technical, engineering, and ecientific disciplines and accustomed to keeping the company in compliance with complex regulatory codes—may not be skilled in business basics.

To work effectively with business staff on environmental initiatives that offer paybacks, most of today's environmental managers need to acquire skills for framing environmental issues in business terms and communicating their bottom-line value. They must state objectives clearly and provide tangible measures of results. Baxter's packaging initiative succeeded in part because the goal was familiar and compelling to business managers: to meet or exceed customer expectations while reducing costs.

Through approaches like these, leading companies are reshaping the relationship between business goals and environmental activities. They recognise that only limited results can be won by demanding that business staff should meet environmental obligations; instead, they let the recognition of business value drive their environmental efforts.

Ronald A.N. McLean and Jonathon B. Shopley are based in Brussels at Arthur D. Little's European Environmental Management practice.

MSH RDANI



Thinker, tailor, screenwriter, sailor, rich man, foreman, businessman or comic? (It must be something in the water.)

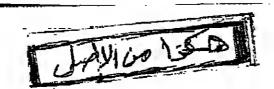
From Lord Leverhulme to Leonard Rossiter, William Pilkington to Willy Russell, Merseyside has always been incredibly rich in one natural resource. Its people.

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Television/Christopher Dunkley

Zinc stoats - and the Prix Italia

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mare, promises of co-production money are made with all the passion of a teenage summer love affair - and the 48th Prix Italia broadcasting festival is over. Hundreds of delegates, jurors and observers return to scores of countries, and once again it has been proved that, whatever we may think from watching the screens in our own homes, the world is awash with high quality television. Six television prizes have been

awarded, two each for drama, arts and documentary, each worth L15m (about £6,300) and in every case there have been arguments, perfectly reasonable ones, in favour of other contenders. Fifteen or 20 years ago festivals of this sort attracted an irritating proportion if "duty" entries which looked as though they had been produced by some national tourist office and clearly stood no chance of e prize. Now such entries are rare. Out of 35 documentary entries this year at least ten could have been in the

In fact the main award, the Prix

Italia itself, went to Return To The Dying Rooms, a horrifying account of cruelty to children – particularly girls - in Chinese orphanages made by the UK's Channel 4. Shot on a hidden camera, it shows appalling scenes of children and even babies lashed all day to commodes with the sort of tics you see in caged animals. China's rapid journey towards the status of top world power was one of the unplanned

themes of this year's festival, and it

is hard to see how the Chinese will

be able to ignore the evidence of

this programme if they want to be

taken seriously among other major The "special" prize for documentaries (not second prize, perish the thought, yet clearly not first prize) was awarded to Troublesome Creek: A Midwestern, an interestingly personal yet indulgently long programme about American farming which was described here last week.

The Prix Italia for television drama (32 entries) was won by HRT of Croatia with Isprani, translated as "The Washed Out", a story about the difficulties, emotional and practical - where do you make love when your family shares a two-room flat with a refugee? - of young people attempting to begin their lives in a society which has been literally and metaphorically smashed to pieces. In this category the special prize was given to Charlot & Charlotte, e production which, though well made and funny, tries a little too hard to be

the Danish Thelma And Louise, and suffers from the longueurs familiar from so many television serials. Smallest and weakest of the three categories was music and arts, which attracted 24 entries. Here the Prix Italia went to Germany's Tod Für Fünf Stimmen or "Death For Five Voices", a documentary about a 16th-century Italian composer named Gesualdo whose music is

said to have been so far ahead of its award prizes to one another, may time that nothing else like it was heard until the coming of Wagner. Whether or not you like his work (and you might think that 16th-century Italian music had been doing pretty well without Signor Gesualdo), some of us found the style of the programme with its jokey pursuit of ghosts somewhat trying. The special prize was awarded to the BBC's Enter Achilles, a television version of the latest stage production by the excitingly different all-male

o British television maintained its long standing record as the most successful competitor at this festival, winner over the years of more than twice as many top prizes as the next most successful nation, France. Outsiders, scornful of the readiness of television people to

modern dance company DV8.

question the significance of such a record, and their doubts might be strengthened by the scepticism of some insiders. Back in the 1960s Gus MacDonald, now a hig wheel in Scottish Television but then a simple left-wing programme maker, dismissed the entire panoply of Silver Swallows, Golden Roses and Bronze Bears as "zinc stoats".

He was pretty well right. An awful lot of television awards came from events where juries included starlets, football players and local politicians. The value of such prizes was highly questionable. There was just one festival where integrity seemed virtually impregnable. At the Prix Italia, oldest of the lot, launched as a radio event in 1948, you were judged by your peers: the juries consisted entirely of programme makers. Documentaries were judged by documentary makers, arts programmes by producers of arts programme

Most important of all was the simple rule: in any category an organisatioo could have either a programme or a juror but oever

As a result, the bad smell which hung around so many festivals where jurors helped award prizes to programmes from their own companies, was absent from the Prix Italia. But the Italia organisers do not seem to heve realised how centrally important these arrangements were in earning unique prestige for their event. A couple of years ago, arguing that there was now so much co-production that It was virtually impossible to create a wholly disinterested jury, they scrapped the old rules. Consequently this year we had the unedifying sight of the Prix

Italia for television music and arts programmes being awarded to ZDF by a jury whose chairman came from ZDF, and the special prize in

television drama being awarded to Danmarks Radio by a jury whose chairman came from Danmarks Radio. These may be the most honourable individuals io the history of the world, and the programmes in question the most deserving. The point is that under the old rules nobody ever had to even wonder about individual integrity because the system itself had integrity built in.

most is to have the evidence put before the world that. whatever the popularity of soap operas and programmes of bome video clips showing bridesmaids tripping over their dresses, there is still a large quantity of worthwhile television being made in countries as diverse as Japan and Poland, Canada and Hungary, Brazil and Switzerland. Homan oature being what it is, that is unlikely to occur without the inducement of prizes. Since there are now sald to be 94 festivals of television and video around the world there is no difficulty in finding a prize or two Finding prestige and integrity is another matter.

Theatre/Alastair Macaulay

# The Aspern **Papers**

here is one astounding Papers - the 1959 stage adaptation of the Henry James story by Michael Red-grave - which demonstrates to perfection how e live performance can illumine e classic work of fiction. It occurs in the middle of the play, and it is of all things - a song. The aged Juliana Borderean has commanded her plain and no longer young niece, Miss Tina, to sing to their lodger, Henry Jarvis, an old song, "The Green Hussar", which Miss Tina used to perform sweetly in her youth and whose words had been written by an unnamed noet of Miss Bordereau's Jouthful acquaintance.

The song itself, sung unac-companied, is deeply charming, with the flowing lines and little flourishes that mark such Irish folk songs as "She moved through the fair". And as Miss Tina sings it, you hear in her not only her current tentativeness but also a lightness and things sound now carefully preserved, as if in tissue. You even hear the governessed correctness with which she must have learnt the song. As the song continues, its stillness and beauty exert e potent spell as they must once have done back in the days when Miss Bordereau was still a great beauty and had a great poet's love. Sung again now, it also hints now at the feeling that Miss Tina hopes may be dawn-

ing between herself and Jarvis. Hannah Gordon, who plays Miss Tina in this revival, has surely done nothing better. Much of her accomplished performance is along the lines of Olivia de Havilland's celebrated film performance of another frustrated Jamesian spinster, Catherine Sloper, heroine of The Heiress. The romantic hopes and doubts of I the character are visible in her eyes, and she makes Miss Tina's charm and inhibition appareot in equal measure. But the song is something else. Revealing things in Miss Tina and in Hannah Gordon we bad not known, it becomes the beating

beart of the play. At the end, incident in the current as Miss Tina opens the trunk revival of The Aspern containing the Aspern papers, she comes across a green hus-sar'e uniform; and the tiny pang she experiences is conveyed by Gordon with eloquent

economy. There is little other reason to see this staging. Instead of the original features and brilliant narration of Henry James's story. Redgrave's adaptation certainly as directed by Auriol Smith - keeps reminding you of several other stories. In particular, The Aspern Papers seems here heavily derivative (as it is not when you read it) of The Queen of Spades: the old lady with a secret, the obsessive younger man, and the niece caught between them.

he old Miss Bordereau, played with stale flamboyance by Moira Lister, ends the second act by advancing on Jarvis with her stick, calling him "Publishing scoundrell". and then collapsing in a heap youthfulness of voice that sur ... (Curtain.) Not long before, she prise you - though these has had a contrived little mad ne of revealing i and fantasies - which Lister rattles through with a foolish briskness that destroys its impact.

Daniel J. Travanti judges the quasi-English accent of the American critic nicely, but the effort seems to cost him all vocal comfort. Like e fading soprano, he spends the play switching between nasal and chest registers to disconcerting effect. Vincent Boluda makes an impressive West End debut as the sly manservant Pasquale, and the eudience enjoys Yvonne Bonnamy in ber impersonation of Assunta, the suspicious Italian maid.

Sean Cavanagh'e set does a good deal to make us believe we are in a fading old Venetian house. Some poor stagehand is kept busy on an old wind machine during a storm when he is not making the shutters bang to and fro. Meanwhile we have a continuous view of the garden, most of whose many leaves stay mysteriously unruffled by the gale.

Wyndhams Theatre, WC2.



Romantic hopes and doubts: Hannah Gordon and Daniel J. Travanti

Theatre/Ian Shuttleworth

#### A restless Richard as a variety of courts and counmechanistic when it should be cil chambers - also contains

teven Pimlott's production of Richord III, greeted with much bead-scratching last autumn at Stratford, remains e bewildering hotch-potch. It boasts both narrative and linguistic clarity (necessary but rare for Shakespearean histories), and e number of central performances which, whilst majestic, convey curiously little sense of majesty. And at its centre is David Troughton's interpretation of Richard Crookback of Gloucester as the consummate performer: the scene in which Richard is pressed to accept the crown is played as a blatant piece of stage management.

This Richard never switches off he is always assuming a role, always delivering lines rather than speaking words. Dressed in flaming red, he aims for the impish appeal of the Vice in a medieval morality play. The net effect is that tragedy is something which happens, if at all, around Richard rather than to him.

Tobias Hoheisel's set - composed largely of a livid green, blasted plain with a single stanted tree (more Godot than Gloucester) and an npstage closet-cum-truck which serves

an area demarcated as a kind of limbo. Here the ghosts of those unfortunates despatched by Gloucester periodically congregate; Queen Anne'e death is signified by Racbel Sanders walking with slow resignation from the court into this shaded quarter, a move later repeated by Richard himself after the battle of Bosworth Field. The battle is not presented at all: Richard crosses an empty stage to sit in darkness, slowly and ironically applauding Henry of Richmond's closing victory speech.

here are few earlier hints that even this capering monster may heve a conscience. notably in conflicts with his mother (whom, unfortunately, Diana Coupland renders as more petulant than wrathful), though to all intents and purposes Richard's despair comes out of nowhere. The supernatural dream on the eve of Bosworth is staged with Richard and Henry sitting side by side at a council table as the succession of shades file in to damn and bless them respectively, but the scene remains

potent; the audience has been shown hardly any indication of e "real" Richard, and so does not engage with his downfall. Michael Siberry makes a noble, lyrical Clarence, and Paul Bentall's Hastings is one of the few loci of humanity; moreover, Richard's outburst against Hastings, sending him scurrying under the table, is virtually the only occasion on which we see his malevolence unbridled. John Nettles growls and looms obligingly as Buckingham, but to my mind Nettles on stage is always visible doing acting. Rachel Sanders is handicapped as the Lady Anne in that she is never able to make the dramatic running.

Imposing interpretative concepts upon plays too often means that a particular aspect works magnificently at the expense of the whole tapestry. Pimlott's Richard III is a case in point: the magnitude and relentlessness of Troughton's performance leaves little room for us to glimpse the spirit either of Richard or anyone else.

In repertory at the Barbican Theatre, London EC2 (0171-638

T iche marketing has ensured the Lufthansa festival a corner of its own in the crowded June diary of London music. It always keeps to its Baroque theme, and has decided to restrict its activities to its main venue, St. James's Church in Piccadilly.

This year there are a dozen events, supplemented by free lunchtime recitals by young artists. As the festival has progressed, the dominance of the early music movement by British and Dutch groups has given way to a broader range of activity within Europe and that is reflected in this year's programme, which includes a return visit by Musica Antiqua Köln and eppearances by Musica ad Rhenum and the

Italian Accademia Bizantina. The home team is led by the St. James's Baroque Players, the festival's resident group. whose prime performance this year was Handel's oratorio, or "bawdy opera". Semele. No matter that we had recently

Music Lufthansa Baroque

seen it staged at Coveot Garden. Ivor Boltoo's coocert performance had a quite different feel about it, mainly because be tailors his swift speeds and light-fingered style to suit the cburch's relatively intimate acoustic. Given the uniformity of style

that he imposes on his excel-lent musicians, Boltoo had chosen an unexpectedly mixed cast of singers. At the "authentic" end, there were Ruth Holtoo as a light, flutish Iris and Nancy Argeota, a pure-voiced though stronger soprano as Semele, in the opposite corner were Della Jones's truly operatic Juno, wickedly overplaying her chest register, and Alan Ewing's sonorous Cadmus. Paul Agnew sang "Where'er you walk" with

good-mannered musicianship and occasionally shallow tone; Catherine Wyn-Rogers was an effective Ino. This seems to be Semele's year and it will be interesting to compare Bolton's performance with William Christie and Les Arts Florissants at the Proms in August.

The night before, the festival had kept up its policy of inviting interesting European Baroque groups by bringing over Le Concert Spiritue directed by Herve Niquet from Paris. The programme coo trasted motets by Lully with those of his contemporary and arch rival at the court of Louis XIV, Peolo Lorenzani. At the time Lorenzani was the clear loser, but his music has a clear-sighted purpose of its own and Niquet's excitable performances meant that there was never a dull moment.

Richard Fairman

Further events in the Luftbansa Festival tonight and tomorrow.

INTERNATIONAL

## ■ AMSTERDAM

CONCERT Concertgebouw Tet: 31-20-5730573 Radio Kamerorkest: with conductor Ton Koopman and soprano Luba Orgonasova perform works by Mozart; 8.15pm; Jul 5

#### BARCELONA

Mercat de les Flors Tel: 34-3-3017775 Richard III: by Shakespeare (in French). Directed by Matthias Langhoff and performed by La Fonderie. The cast includes Hugues Boucher, Stéphane Comby, Maxime Lefrançois and Jean-Michel Portal. Part of the Festival d'estlu de Barcelona GREC 96; 10pm; Jul 3, 4,

#### **■ BERLIN**

**EXHIBITION** Das Bauhaus-Archiv, Museum für Gestaltung Tel: 49-30-25400278 Laszlo Moholy-Nagy zum 100.

Geburtstag: retrospective exhibition devoted to the work of the Hungarian sculptor, painter, designe and photographer Laszlo Moholy-Nagy (1895-1946), on the occasion of the centenary of the artist's birth; to Dec 1996

# **■ BIRMINGHAM**

**FESTIVAL** Birmingham International Jazz Festival Tel: 44-121-454-7020 Birmingham International Jazz Festival: with 200 performances at 50 venues and more than 650 musicians the 12th Birmingham International Jazz Festival features 70 bands providing 400 hours of music; from Jul 5 to Jul 14

#### BONN **EXHIBITION**

Kunst- und Austellungshalle der **Bundesrepublik Deutschland** Tel: 49-228-9171200 The Great Collections IV: Moderna Museet, Stockholm: this exhibition features approximately 200 works of modern art from the collection of the Moderna Musest in Stockholm, beginning with examples of early modern art up to contemporary art; from Jul 5 to Jan

#### **■ CHICAGO**

EXHIBITION Art Institute of Chicago Tel: 1-312-4433600 Splendors of Imperial China: Treasures from the National Palace Museum, Taipei: almost 400 works spanning four millennia have been selected for this exhibition from the collection of the National Palace Museum in Taipel; to Aug 25

#### DUBLIN CONCERT

National Concert Hall - Geoláras Náisiúnta Tel: 353-1-6711888 A Feast for the Fourth!: concert celebrating Independence Day, featuring ragtime planist Colm 'Stride' O'Brien, boogie and blues pianist Stan Greig and harlem strida planist Peter O'Brien; 8pm; Jul 4

#### ■ FLORENCE

**OPERA** Teatro Comunale Tel: 39-55-211158 Aida: by Verdi. Conducted by Elio Boncompagni and performed by the Coro e Orchestra del Maggio Musicale Fiorentino. Soloists include Dolora Zajick and Nina Rautio; 8.30pm; Jul 3, 4, 5

#### HANOVER **EXHIBITION**

Sprengel Museum Tel: 49-511-1683875 Zeitströmungen: exhibition of the collection of modern art of the Niedersächsische Sparkassenstiftung. The collection includes works by German artists such as Georg Baselitz, Sigmar Polke, Gerhard Richter and Rebecca; to Jul

#### ■ HUMLEBAEK

FYHIBITION Louisiana Museum of Modern Art Tel: 45-42 19 07 19 NowHere: a large-scale

ntation of International contemporary art. The exhibition is organized in collaboration with four guest curators; to Sep 8

#### LONDON

CONCERT St. John's, Smith Square Tel: 44-171-2221061 Orchestra and Choir of St. John's, Smith Square: with conductor John Lubbock and pianist You-Chiung Lin perform works by Kern, Barber and Gershwin; 7.30pm;

Wigmore Hall Tel: 44-171-9352141 François-René Duchable: the pianist performs works by Beethoven, Liszt, Ravel and Mussorgsky, 7.30pm; Jul 4 EXHIBITION National Portrait Gallery

Tel: 44-171-3060055 David Livingstone and the Victorian Encounter with Africa: this exhibition offers an account of the life and times of David Livingstone. from his birth and childhood in the cotton milis of Lanarkshire to his journeys as missionary and explorer

# ■ LOS ANGELES

across the continent of Africa; to Jul

CONCERT **Hollywood Bowl** Tel: 1-213-850-2000 The Hollywood Bowl Orchestra;

with conductor John Maucen and vocalist John Denver perform works by Bernstein, Rodgers, Sousa and Copland; 7.30pm; Jul 3, 4 EXHIBITION Los Angeles County Museum of Art Tel: 1-213-857-6000

 The White House Collection of American Crafts: exhibition featuring works by 72 craft artists working in the media of glass, wood, clay, fibre and metals; from Jul 4 to Sep 29

#### MILAN

**OPERA** Teatro alla Scala di Milano Tel: 39-2-72003744 La Fille du Régiment: by Donizetti. Conducted by Donato Renzetti and performed by the Opera alla Scala. Soloists include Marialla Devia, Valerie Esposito and Giuseppe Sabbatini; 8pm; Jul 5

#### ■ NEW YORK EXHIBITION

Museum of the City of New York Tel: 1-212-534-1672 Gaelic Gotham: A History of The Irish in New York: exhibition featuring over 400 original artefacts that are displayed in thematic and chronological sections; to Oct 27 The Metropolitan Museum of Art Tel: 1-212-879-5500 Bare Witness: Clothing and Nudity: exhibition examining costume in its dual role as both concealer and revealer of the female body from the 18th to the 20th

#### PARIS

century; to Aug 18

L'Opéra de Paris Bastille Tel: 33-1 44 73 13 99 Lucia di Lammermoor: by Donizetti, Conducted by Bruno Campanella and performed by the Opéra National de Paris. Soloists include Roberto Frontali, Andrea

Rost and Stuart Neill; 7.30pm; Jul 4,

#### ■ SCHLESWIG **FESTIVAL**

Schleswig-Holstein Festiva Tel: 49-40-2482110 Schleswig-Holstein Musik Festival: main theme in this year's festival, featuring some 100 concerts, is the music of Schoenberg, Berg and Webern. Opening and closing concerts are performed by the NDR-Sinfonieorchester, featuring works by Anton Bruckner, from Jul 6 to Aug 25

#### ■ TEL AVIV

**OPERA** The Opera House Tel: 972-3-6927777 The Bartered Bride: by Smetana. Conducted by Mark Elder and performed by the Israelian Opera. Soloists include Yevgeni Shapovalov, Marina Levitt and Ludek Vele; 1pm; Jul 5

#### WASHINGTON EXHIBITION

Arthur M. Sackler Gallery Tel: 1-202-357-2700 Traders and Raiders on China's Northern Frontier: exhibition reflecting the flourishing contacts and complex interrelationships between China and its northern neighbours: to Sep 2 Listing compiled and supplied by ArtBase The International Arts Database, Amsterdam, The Netherlands. Copyright 1996. All rights reserved. Tel: 31 20 664 6441

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European Money Wheel Nonstop live coverage until 15.00 of European business and the financial

17.30 Financial Times Business Toniaht

CNBC:

08.30 Soutwk Box

10.00 European Money Wheel

18.00 Financial Times Business



**Edward Mortimer** 

# Exit the atomic age

Nuclear weapons could be reduced and eventually abolished if the countries that control them bury their differences

Tanzania, another is dealing with those responsible for the Nuclear weapons are vesterday's issue. There are 1994 genocide in Rwanda. no longer two superpowers poised to destroy each other Defence counsel for the and the rest of us at the touch accused could argue that their of a hutton. Iraq has been dis-armed. North Korea has been crimes pale into insignificance beside the utter devastation of hought off. The Non-Proliferahumanity which use of tion Treaty has been extended indefinitely. Mr Tony Blair. nuclear weapons would cause. The issue is related to the test ban talks, which broke leader of Britain's Labour down because Britain, Russia and China, along with Pakis-tan, insisted that the ban party, says be would press that hutton if necessary, hut

no one any longer imagines that a British prime minister could come into force only when ratified by all eight would ever have to take such known nuclear powers - the five recognised by the treaty Consensus relgns, right? Wrong. Negotiations on a plus the three states (India, comprehensive test han bave just broken up without agree-Israel and Pakistan) which have not signed the treaty and are deemed to be on the ment; and next Monday the international Court of Justice "threshold" of nuclear status. in The Hague will deliver a long-awaited advisory opinion india has served notice it will not accept the test ban unless on the legality of using the five declared nuclear powers agree to a timetable nuclear weapons or even for total nuclear disarmament. threatening to do so. Its opinion on this matter

has been requested not by

Health Organisation and the UN General Assembly. Forty-

three governments have made written submissions, and 22

made oral statements during

public hearings last autumn.

More than two-thirds argued

for illegality. But four of the

five recognised nuclear pow-

ers urged the court to make

no ruling, arguing in effect

that the issue is political, not legal. (The fifth, China, has

taken no part in proceedings.)

It will be surprising if the

court, generally a cantlous

body, comes out with a ruling that in effect criminalises the

world's most powerful govern-

ments. But the issue is a tricky one. Chemical and bio-

logical weapons have now been banned outright, and the

indiscriminate killing of civil-

ians with any sort of weapons

is condemned under the

Geneva conventions. Next

door to the court in The

Hague, an international crimi-

nal tribunal established by the

UN security council is buslly

prosecuting people accused of

war crimes in former

Yugoslavia, while in Arusha,

On one level, India's stand is unrealistic and exasperatsome ad hoc bunch of crackpots hut by the World ing. Tactically, it has succeeded in provoking an argument among the declared nuclear powers: the US and France would accept a compromise allowing the ban to come into force before india ratifies it, while the other three, with Pakistan, are standing firm. But the issue should not be

The nuclear club

7.770

8,527

Less than 100

60-120

Russia

Declared and undeclared powers (January 1995)

Approximate size of arsenal (numbers of stockpiled strategic warheads

reduced to mere tactics. The end of the cold war has made powers would come down to a possible a serious discussion about the future of nuclear weapons, and in the US that discussion bas begun. The Henry L. Stimson Centre\*, a Washington think-tank named after the US secretary of war under whom the atomic bomb was first developed, is running a project "to ancourage serious consideration of the

weapons of mass destruction". The project's steering committee is chaired by Gen Andrew Goodpaster, a former supreme allied commander in Europe. It includes three other senior retired generals and such luminaries of the US defence scene as Robert McNamara (secretary of defence in the 1960s) and Paul Nitze (arms control negotiator for successive administrations

conditions undar which all

states might move toward the

progressive elimination of all

from Truman to Reagan). its second report, published last year, sets out a four phase strategy for eliminating nuclear weapons. In the first phase, which could be completed by 2003, the US and Russia would bring their arsenals down to roughly 2,000 warheads each (below the level already agreed in the Start II treaty). In the second,

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being detected.) This programme would take

Each phase could only begin when the previous one was clearly seen to have worked. No one imagines that nuclear weapons can be wished away overnight. But that does not mean we must resign our-selves to living with them forever. The greater danger is that, by refusing even to contemplate a programme for doing away with them, established nuclear powers will appear to be relying on them to perpetuate an unequal international order, in which some states are entitled to greater security than others. In such a world, no non-

proliferation treaty can hold indefinitely, whatever it may say on paper. \*21 Dupont Circle NW, Fifth Floor, Washington DC 20036.

Phone

353-1-679-1414

few hundred warheads each while the threshold states would be entired out of the closet to join in the process of multilateral reductions. in Phase III all remaining

all five declared nuclear

arsenals would be cut to tens of weapons, held under international safeguards; regional and global collective security regimes would be developed: and nuclear powers might agree to become "trustees" of nuclear weapons, forswearing first use but threatening to respond to any nuclear attack against any state.

Finally, in Phase IV residual arsenals would be eliminated. Capability to reconstitute them would be internationally monitored, and all materials or knowledge relevant to weapons of mass destruction would be placed under stringent control. The US and other former nuclear powers would keep components of their former arsenals under international safeguards. (The storage sites would have to be numerous and dispersed, and the verification regime strict enough to ensure that no vio-lator of the ban could amass enough nuclear weapons to destroy all the sites without

several decades to implement.

# ·LETTERS TO THE EDITOR-

Number One Southwark Bridge, London SEI 9HL

to fine ). e.mail: letters editor@fi.com Translation may be available for letters written in the main international impusges.

#### No miracle for the poor in China

From Mr Paul Spray.
Sir, The World Bank's World Development Report on economies moving from plan to market ("Rapid liberalisation is starting to pay off", June 28) sits uneasily beside received wisdom on the east Asian miracle. Chinese growth continues to be extremely rapid, but the report suggests that since 1985 it has

stopped reducing poverty. One reason is that the state has halved its role - from 36 per cent of gross domestic product in 1978 to 18 per cent in 1994 - and cut transfers from wealthier to poorer regions. At a local level, health and social services have suffered. The message from the Bank seems to be more plan and less market.

Paul Spray, policy director Christian Aid, London SE1 7RT, UK

#### A serious purpose

From S.D. Sandell Sir, The conferences on family policy which Vice-President Al Gore has organised and moderated each of the last five summers may sound ridiculous to Patti any way, increase compelition. Take the example of the Waldmeir ("Family values put Clintons back on moral high ground", June 25), but their purpose is deeply serious - to the family, in all of its manifestations, on the basis that this is the social unit which provides far and away the most profound support and launch pad for our future citizenry and workforce. This year's conference addressed

- and not only in the US - is evolving to meet the demands of working parents. Perhaps the informality of the conference was deceptive: nonetheless Ms Waldmeir's sarcasm does a disservice to a

serious journal such as yours. S.D. Sandell. 17 Greyhound Road,

London W6 8NH, UK

work and the family; your

correspondent presumably is

aware of the extent to which

corporate policy and legislation

# Unlikely that the European central bank would be able to intervene

From Mr William L. Jacobson. Sir, I agree with Manfred Neumann ("The ins and outs of Emu", June 28) that the idea of putting an intervention obligation on the European Central Bank is ill-conceived. But his contention that the absence of an intervention obligation would make a future exchange rate mechanism (ERM) more flexible than the

previous one is unfounded. In practice, the central bank would be no more likely to intervene without limit against a sustained speculative attack on a peripheral currency than was the Bundesbank. However suspect the market's motive for such an attack, the price of fighting it - an early loss of credibility with respect to its inflation fighting credentials would be far too high.

Mr Neumann's suggestion

that the central bank be given the prerogative publicly to propose realignments is well taken. There is, of course, no guarantee that the parity it chose would cure a given economic imbalance ureaucrats are often wrong. But so are markets.

operandi is surely one in which market and central bank respect and listen to each another. And, the UK authorities might find it easier to swallow the advice of the European central bank than they did the Bundesbank's.

The preferred modus

This points to a structural reason why ERM II would be more likely to survive than the old ERM. There is a big difference between having a single country serve as the anchor and having seven or eight countries do so. Indeed, it

was only in practice that the D-Mark came to anchor the old ERM: in theory the Ecu was supposed to do so.

The dramatic Bundesbank rate hikes which so strained European monetary relations in the early 1990s were a direct result of the Kohl government's purchase of east German votes (great politica, bad economics). The Maastricht treaty, however, explicitly rules out any such fiscal thrust on the part of Emu member states. Where tension arises between centre and periphery, It is therefore less likely that the monetary policy of the anchor will be its

William L. Jacobson, Millennium Partners, L.P., 111 Broadway - 20th Floor, New York, NY 10006, US

#### EU must act on airline competition

Airlines. Does that

From Mr Per Stenmarck MEP. Sir, 1 appreciate Mr Austin Reid's comments (Letters, June 26) on what I wrote (Letters, June 19) about airline alliances. I also appreciate the clarification which Mr Reid made on code-sharing agreements. His comments are reassuring. However the main problem remains. Code-sharing with a great number of other companies, 11 in the case of British Midland, is a distortion of competition. It does not, in

code-sharing agreement increase competition? I welcome the European Commission's decision to look into the proposed alliance between BA and AA and also

proposed alliance between

British Airways and American

to take a good look at alliances that already exist. The European Union must take action, not only hy encouraging competition through tougher rules regarding airline alliances, but also by increasing competition

in the area of ground handling at airports and creating new rules for airport charges. New rules on slot allocation and air traffic management are also urgently needed. Combined with the deregulation scheduled for next year these improvements would increase competition and result in lower

Per Stenmarck, member, transport group, European parliament, Eue Belliard 97-113, B-1040 Brussels, Belgium

# Put warning label on management fads

From Prof Michael S. Minor. Sir, The recent defection of Morgan Stanley chief economist Stephen Roach, the "guru of downsizing", to the position that management may have cut employee ranks too deeply is a relief to me as a business school professor. I never spent much time on downsizing in the classroom. Now I won't have students feeling that I have misled

Lncky me for avoiding this fad. But it brings up the deeper question of the appropriate role of business professors in "fads", especially at the graduate level, where students may be able to implement

classroom learning in short order. I shudder to contemplate the

results if future physicians were educated with a significant dose of speculative treatments. Would, say, ingested orange peels cure cancer, or massive doses of such and such vitamin/amino acid/etc? My hope is that. while new physicians are not left ignorant of prospective breakthrough treatments, they are introduced to them with careful coaching as to their speculative nature, and students are reminded that done before the latest wacky idea is elevated to cure.

I fear that similar

circumspection is absent from business school introductions to new management practices whose long-term effects have not been judged. It is a cautionary note that the "tried-and-true", while perhans less scintillating, and provoking less discussion, at least has the force of having

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Conmittee

Fads should be treated as such, and perhaps most importantly, labelled as such.

Michael S. Minor. associate professor of marketing University of Texas-Pan Edinburg TX78539-2999. US

Andrew Adonis

# The two faces of welfare



fare state be question being asked across the developed world as policymakers look at demographic trends and government spending projections and warn of dire straits ahead. Four years ago Bill Clinton,

the US president, took office pledging to "end welfare as we know it". That refrain is spreading from the US to western Europe, the cradle of the welfare state, where additional pressure to curb welfare spending is coming from the Maastricht treaty's rules on national dehts and borrowing. For the French and German governments in particular, the estabishment of a single currency in 1999 is a cardinal policy goal. That involves spending curbs, and the political will is

there to attempt them. Welfare reform thus almost chose itself as the topic for the first meeting last weekend of the Oxford Forum a seminar of parliamantarians, senior officials and analysts from the US, Britain and Germany. The forum is designed to deepen mntual understanding beyond the strategic and security issues that preoccupy most

such gatherings. Most revealing was the contrast between the forum's opening paper and presenta-tions and the subsequent discussion. "The problem of reconciling burgeoning welfare budgets with growing public deficits and dwindling workforces is large and cannot be ignored," noted the paper. From the initial statements it appeared that three things were agreed: welfare spending was unsustainable given demographic projections: a broad hipartisan consensus existed in each country about the need for change and its direction: and initiatives in one country could easily be translated to

All three dissolved in debate.

graphic projections showing barely two workers for every retired person by 2040 were hothy disputed. A German MP from the opposition Social Democrats argued that insurance contributions for healthcare in Germany need rise only marginally over the next 15 years to cover the ageing population. After 2010 demographic change would impose signifi-cant new hurdens, "hut it would be wrong to sacrifice our socially oriented state through premature and possi-

bly misplaced alarmism", he Support came from the unlikely source of a British Tory minister who lauded the virtues of the UK's taxfinanced comprehensive health service, noting canstically that alarmist projections about "unsustainable" growth in health spending had appeared every decade since its establishment in 1948.

It was soon clear that the delegates considered the predicament of each of their countries to he largely distinct from the others. British and American delegates gasped as the details of Germany's generous insurance benefits ware explained German unemployment insurance provides claimants with about 80 per cent of their previous income for one year and a somewhat lesser

'It would be wrong to sacrifice Germany's socially oriented state through premature and possibly misplaced alarmism about

demography'

Can the wel- The implications of demo- income-related figure for another two years. Then comes basic assistance without time limit, set at DM2,700 (£1,139) a month for a couple with two children. This is far in excess of the equivalent henefits available in the UK, let alone the US, yet German MPs insisted that only marginal adjustments were needed or politically possible.

To the non-Germans, the sur-

prise was that German unemployment - at 9 per cent it is nearly two-thirds higher than the US rate and a little above the UK's - was not higher still This provoked discussion of the importance of wider social forces in shaping welfare states, notably the effect of Germany's superior education system and work ethic in limiting abuse of what one US Congressman duhbed "the higgest scrounger's charter in history". It was the turn of the Ger-

mans to be aghast as US delegates explained the various proposals for "workfare" work for social security benefits - being devised by US states for single parents. One US analyst predicted a "race for the bottom" in benefit levels as the federal government sought to withdraw from unemployment support.

"This is going back to the Middle Ages - beggary on the one hand and private charity on the other," a German MP declared. The British were divided. One Tory MP thought workfare was "right in principle and inevitable in practice", but the UK Treasury raised a host of practical objections.

it was not, however, a simple case of European resistance to American laisser faire. Both the British and Germans were surprised that relatively generous federal retirement pensions should be sacrosanct in the US, while other benefit levels are low and vulnerable and a national bealthcare scheme seems an impossible dream. "It's pure politics - the elderly are untouchable," said a Con-

A dominant theme was

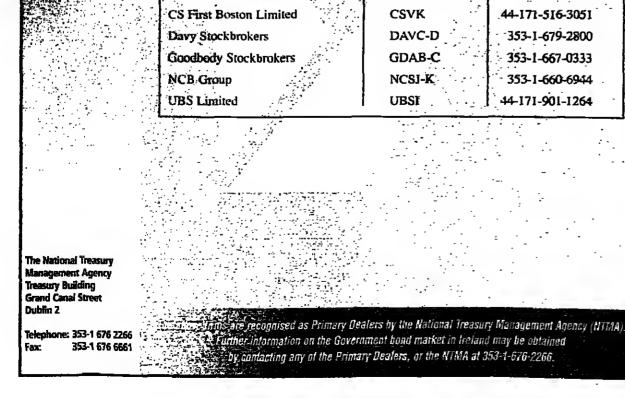
sharply differing notions of the realm of the possible in the three countries. A German analyst declared workfare morally repugnant and impossible to implement given cultural memories of forced labour and

slavery. A British minister responded by questioning German mili-tary conscription, which he described as an "impossible concept" in the UK. Yet in Germany it is critical to providing social services given the high proportion of young men opting for civilian service as an alternative.

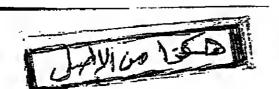
Healthcare was the one significant area where delegat believed it possible to copy policies across horders. There were sharp exchanges between US delegates about the fate of the 44m Americans without adequate health insurance cover and the profits of the Health Maintenance Organisations responsible for providing healthcare to many Americans. So too between British delegates about the need for rationing within the tax-financed National Health Service as demand outstripped the readiness of governments to supply

The German health syste managed competition between insurance funds providing comprehensive health cover, with employees obliged to join siasm. One UK Tory MP saw it as an "excellent means of elim-inating rationing by passing the cost from the taxpayer to the private sector without giving up central control".

But it was the differences, not the similarities, between the three welfare systems that made the strongest impression. When a US Republican Congressman claimed that welfare was "basically a matter of poor relief - a struggle between our hearts and our pocketbooks which depends on our revenues", the extremes of American individualism and German solidarity were fully exposed. The British, typically, came through the middle. -



ABN AMRO/Riada Stockbrokers



# FINANCIAL TIMES

Number One Southwark Bridge, London SE1 9HL Tel: +44 171-873 3000 Telex: 922186 Fax: +44 171-407 5700 Wednesday July 3 1996

# Keeping state aids in check

Yesterday's demand by Unice, the European employers' organisa- Brussels to retreat from its "One tion, for tougher enforcement of EU rules on state aid to industry is to be applanded. The initiative not only focuses attention on a real economic problem but also suggests an encouraging shift in business opinion. In the past, few companies were ready to condemn government hand-outs from which they stood to benefit. Now, it seems, more are disposed to view such largesse as an insidious threat to fair competition.

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The change of mood is particu-larly timely, when growth in many European economies is fal-tering. It is et this point in the cycle that European industry's walking wounded rattle their beg-ging bowls most loudly. Despite Unice's defence of virtue, little suggests that these petitioners will be less vocal this time or their national governments less amena-ble to special pleading by influential vested interests.

In theory, the European Com-mission has impressive powers to block subsidies which jeopardise competition. In practice, its authority is much less clear-cut. The fact that its disciplines fall on the governments which give subsidies, rather than on the companies which receive them, means that crude politics often prevail over the rule of law. Not only is the commission heavily lobbied by national capitals; many of its members habitually refrain from opposing subsidies when producers in their own countries are seeking similar favours. Such

chance, last chance" doctrine on state aid to airlines.

For those reasons, Unice's call for an EU regulation setting out clearer rules and procedures for vetting state aid looks politically unrealistic. Proposals for stricter judicial restraints on govern-ments' pursuit of national interest stand to win little support in the Council of Ministers. Even mem-ber states which want an indepen-dent EU cartel office to emorce competition policy would keep state aid out of its clutches.

Unice is on more promising ground in urging greater transpar-ency in the handling of state aid and a more active role for business in ensuring that disciplines are enforced effectively. Brussels will be less inclined to bend the rules if its deliberations - and the political pressures on it - are exposed to fuller public scrutiny. Its resolve should be further stiffened by the increasing readiness of companies to challenge contro-versial decisions in the European Court of Justice.

In time, privatisation should reduce the incentive for governments to subsidise, while budgetary constraints should limit their means. But so long as they remain tempted to bail out favoured companies with taxpayers' money, more openness is needed to ensure that EU rules are enforced fairly. Meanwhile, aggrieved competitors should be ready to cry foul, kick np a stink and call for their

# Oil's well

The recent development of the UK's North Sea oil has been a remarkable success story. The industry's ability to cut costs, increase production and edd reserves has been much greater than was expected only a decade ago. Operators are making money from oil in hitherto inaccessible reservoirs, despite the fact that crude prices (adjusted for infla-tion) are less than a third what they were in the early 1980s.

It was expected then that North. Sea oil production would decline steeply after the early 1990s. But new techniques for almost borizontal drilling, much better ways of interpreting seismic data, and cheaper platforms have all com-bined to improve the outlook. It is now expected that production will not decline until near the end of the century and then only slowly.

Yet the North Sea oil industry confronts formidable problems. These include developing ever bet-ter technologies for the wild seas west of the Shetlands and finding ways to extract every last barrel from familiar territory in the

North Sea. It is this last problem which Mr Tim Eggar, the UK energy minis-ter, is attempting to confront with his proposal this week to intro-duce competitive bidding into the

next licensing round. He intends to auction some 20 to 30 exploration blocks in "mature" sectors to try to speed up the rate of exploitation. Although the UK

government has used competitive

bidding before, most oil licences were allocated by a discretionary process. Under this system the government would evaluate oil companies' offers to explore a particular block of territory mainly in terms of the number of exploratory wells that each company said it would drill.

The discretionary system gave the government e great deal of power over the offshore operators, and may have been justified in the early years. But the process was slow, cumbersome and opeque North Sea operators have been forming much more flexible commercial relationships in recent years to exploit difficult fields at minimum cost.

A simple enction of new blocks is the best way to reinforce this process. To achieve this, reserve prices must be set low, so that smaller companies may have the chance of picking up less favoured blocks; the government should also consider different types of bid, for example an offer to pay for the licence out of profits rather than up front. This would mirror the kinds of arrangement that oil companies have been making with

There is, moreover, a strong argument for extending the auction to the whole of the next licensing round rather than just to marginal blocks. In both cases the objective must be to provide incentives to maintain the pace of discovery rather than feeding the Treasury with gobbets of cash.

# Power brokers at the bedside

Boris Yeltsin is expected to win Russia's presidential election but the struggle to succeed him is already on the agenda, says Chrystia Freeland

1991, he assumed the position of the powerless head of a Soviet province. Only months later, the Soviet empire collapsed in disarray, and the Russian leader became, by default, the ruler of the Kremitn. Today, President Yeltsin is facing

Russian voters in the first genu inely democratic election of a national leader in the country's history. And yet the celebratory mood which should have greeted this extraordinary achievement has been soured by the visit of an unwelcome spectre from the author-

itarian Soviet past.

Mr Yeltsin has degenerated over the past week into a sickly and secluded figure, uncomfortably reminiscent of the geriatric Communist party Polithum bases who ruled party Politburo bosses who ruled the Soviet Union in the bad old days. The man whom millions of Russians had hoped to re-elect as the embodiment of the country's democratic future has been skulking in his dacha outside Moscow, allegedly suffering from e sore

For Mr Gennady Zyuganov, the Communist challenger, the president's unexpected regression from an energetically flesh-pressing, street-dancing campaigner into the world's most powerful recluse has been a political windfall. The Russian leader's ill health health as galvanised the Communist team into a ised the Communist team into a frenzy of eleventh-hoor activity as the comrades sense that it may still be possible to seize victory from the jaws of defeat.

After months of soporific campaigning which even ardent suppagining which even artest sup-porters were reduced to praising as "calm" and "solid", the Commu-nists have suddenly learned how to produce snappy sound bites, "We haven't seen him [Mr Yelt-sin] for several days and today they

showed us a painted mummy as if they'd just got it from the mauso-leum," said Mr Stanislav Govoru-khin, a pro-Communist film director after the Russian president gave e stumbling performance on television on Monday. "They are suggesting we vote for e living corpse."

It was a great line which, in a more mature democracy, would have done further damage to the reputation of a 65-year-old leader who has already suffered two mild heart attacks in 12 months. Yet despite the president's temporary disappearance, the consensus in Moscow remains that he will be reelected. Even one of the top campaign strategists for Mr Zyuganov admitted yesterday that his candidate was likely to lose.

On June 16, Mr Yeltsin emerged from the first round of this twostage presidential poll with a fhree percentage point lead over his main challenger. Since then, he has improved his chances for the run-off by inveigling General Alexander Lebed, former darling of the Red Army and hero of Afghanistan, who came third in the poll, to join his regime. He also seems certain to win over a majority of the supporters of Mr Grigory Yavlinsky, the liberal candidate who finished fourth. So the only threat to his chances would appear to be his physical frailty.

Muscovite pundits and financiers, both foreign and domestic, are still betting on Mr Yeltsin, not least because the Kremlin's stranglehold over the nation's media has meant that most Russians are only dimly aware of the president's ill health. But while the compliant press could help keep the Communists from coming to power in today's poll,

even the most supine journalists he seemed poised to become the cannot protect Russia's ruling elite from the worrying realisation that Mr Yelisin might not survive until the end of a second four-year term. Thus, even before a single ballot has been cast this morning, Kremfrom US President Bill Clinton. lin insiders have begun planning how to manage Russia's next suc-cession struggle, the fight for power set off if Mr Yeltsin dies or is inca-

pacitated after winning re-election. For a country, and a political elite, whose overwhelming desire is for stability, the prospect of facing another divisive contest for the Kremlin so soon is deeply unwel-come. Worse still, without the charismatic and unifying presence which Mr Yeltsin supplied in his more vigorous moments during this spring's election campaign, the present government could risk being defeated in a rematch against

the battle-hardened Communists. Many Kremlin power-brokers also harbour growing suspicions of Mr Lebed, the new head of the Security Council, who in less than two weeks has undergone a rapid political metamorphosis from outsider, to crown prince, and now to a suspect

cuckoo in the nest. Mr Yeltsin welcomed him into the corridors of power last month in an effort to woo the 11m voters who backed him in the first round of the elections. But within days the maverick officer managed to alienate the authoritarian faction in the Kremlin by conniving in the dis-

democrats' new darling, Mr Lebed changed tack and horrified the lib-eral camp in the government with a series of nationalist comments so harsh as to provoke a public rebuke

months has created a strange paradox for Mr Yeltsin's entourage. n the one hand, the Kremlin team is desperate to beat Mr Zyu-

ganov. To that end it has launched a vociferously anti-Communist campaign, featuring burning churches, footage of Stalinist labour camps and warnings of e return to the chronic food shortages of the Soviet era. But et the same time. Mr Yeltsin's allies have begun to prepare

public opinion for a coalition gov-ernment with the Communists after today's vote. Mr Victor Chernomyrdin, the prime minister, said this week that he would welcome opposition politicians into his cabinet and that he is "certain" they will accept the invitation. Mr Lebed, who recently told Russians of his genetic hatred of communism, changed his mind on Sunday and called for a grand coalition.

The Communists seem equally prepared to abandon their fierce rhetoric and team up with their opponents after what they clearly

regard as the messy formality of voting has been completed. Mr Zyuganov said last week that if elected he would form e broad coalition government and might even ask Mr Chernomyrdin to stay on as premier. Mr Aman Tuliev, one of the Mr Lebed's unpredictability and the fear that the Communists might prove unbeatable if new elections were to be held within the next six willing to serve in a Yeltsin cabinet.

All this has persuaded many Kremlin wetchers that a coalition government is the most likely outcome of an election which Russian politicians - and many western observers - have sought to portray as e violent clash between two

incompatible ideologies. "I am convinced that if Yeltsin wins, the ruling elites will bring the Communists into their government," said a western diplomat in Moscow. "It's the only way for them to avoid another messy succession

struggle if Yeltsin doesn't last." The talk of coalition-building is a reminder that western style democ racy is still a fragile and alien seedling in the soil of Russia's collectivist and authoritarian traditions. Since medieval times, Russia has been ruled from above by a class which allowed political conflicts to emerge only within the confines of a narrow elite. Any disputes which emerged in the rest of society were ruthlessly suppressed.

Even the democratic breakthrough represented by today's ballot is not free from such traditions, as shown by the behaviour of the

country's media, whose diversity one of the great achievements of the post-Soviet revolution. Over the past few months Russia's most talented liberal journalists have leapt on to the government bandwagon, writing shamelessly pro-Yeltsin stories and cheerfully passing off Kremlin black propaganda as inside "scoops" about the Communists.

Millions of the Russians casting their votes today have been given no information to suggest that one of the two candidates on their ballot papers is in such delicate health that he has barely managed to stumble through a single, tightly edited television appearance in the past week. Their choice may be free, but it will be ill-informed, and that will be the fault of a Russian liberal elite that prides itself on its "democratic" convictions.

The media's willingness to conceal Mr Yeltsin's health problems in the name of freedom and democracy is a striking example of the curious bybrid of western ideals and Soviet habits which characterises post-

communist Russia. Mr Yeltsin is in many ways an apt leader for a nation still in a political limbo between its painful past and its dreams of a happier future. He may look disturbingly like former Soviet leader Leonid Brezhnev in the sclerotic final years of his reign. But, for the first time ever, the man who enjoys supreme power in the Kremlin is submitting to the verdict of the ballot box.

# Communists still

Only a year ago Vietnam was the darling of the international investment community. It had resumed relations with the US, stood on the verge of joining the Association of Southeast Asian Nations and embarked on a path of rapid economic growth which promised to make it the next Asian miracle.

This week's Vietnamese Communist party congress was a harsh reminder of how misplaced thet optimism was. Vietnam's economy is still growing at nearly 10 per cent e year, but its living standards are only around one tenth of those of Thailand and it has a worrying balance of payments deficit. Instead of pushing further down the road of economic reform, the congress emphasised the need for a strong state sector.

The moral is that, despite the remarkable rollback of communism around the globe over the last decade, many societies change slowly. Vietnam may be a country of 74m willing consumers, but obstacles to development are many. It is not just poor communi-cations and infrastructure: above all, the party lacks a leadership able to promote reform.

Its caution is understandable. Vietnam's communists remain alarmed by the social and economic disintegration which afflicted the former Soviet Union as party euthority waned. Hanoi's main pre-occupation is to retain control. Too much haste in economic reform would dilute that and risk political divisions between the enterpreneurial south and the more conservative north. The ageing leadership, which has retained power, is also deeply suspicious of younger generations. The next generation down grew up during the war with the US and is Soviet-trained. It will be a long time before the technocrats are ready to take over.

Vietnam's new conservatism reflects a lack of self-confidence in the party. This was no doubt reinforced by an unprecedented objection from the congress floor in response to the old guard's effort to concentrate power in the hands of a committee of five

members of the politburo.
In this climate it would be foolish to expect too much of new investment rules supposedly designed to encourage projects with technology input and export potential.

Vietnam's cadres now apparently think safety lies in keeping foreigners at bay, but this is not a sustainable approach. Expectations have been raised, and Viet-nam will be able to deliver a lasting increase in living standards only if it opens up its markets reduces the role of the state and learns to eschew reliance on the party patronage thet pervades almost every government and commercial decision.

Were it able to do that, Vietnam really might become an Asian miracle. Unfortunately, its congress is a reminder that in real life, miracles are rare.

#### **Prodi** gets hoodwinked

When battle lines are drawn in lialy it's usually between north and south, or Catholics and communists - rarely explicitly between rich and poor. Hence Italians' interest in comments a the weekend by Romano Prodi-prime minister of the new centre-left government. Prodi-appeared to compare his government's economic policy to that of Robin Hood - in other words, taking from the rich to give

The idea of the chubby Prodi kitted out in green tights and ermed with a how and arrow is only slightly more absurd than the pictures of him in full cycling kit which regularly appear in the fralian press, but his simile nevertheless struck a chord. The theme was adopted by Gianni. Agnelli, honerary chairman of Fiat and subject of last month's admiring cover story in Panorama, Silvio Berlusconi's weekly news magazine, which asked "What use are the rich?" Good question. Berlusconi, it turns out, is

almost twice as rich as Agnelii - at any rate, according to Rorbes magazine's latest ranking of the world's wealthy — and is about to get even richer. The former lialian oreinter stands to receive just over 1.1,000hn from this week's floration of shares in Mediaset, his media

empire, But Agnelli got his own back yesterday. When asked to comment on the Forbes ranking, he mischievously replied: "Sounds like it might interest Robin Hood."

OBSERVER

Waste disposals

■ A friendship that began eight years ago on a Florida beach has borne succulent fruit for Michael Ashcroft and Michael de Groote. Soon after meeting they forged a deal to turn Laidlaw, the Ontario-based waste and transport operator founded by De Groote, into the biggest single shareholder in ADT, Ashcroft's Bermuda-based security services and car auction

company. Belgian-born De Groote quickly sold his Laidlaw stake and pocketed about half a billion dollars. He said he was retiring to Bermuda, but resurfaced at the head of Republic Industries, a fledgling waste management outfit. Republic was fired up last August, when De Groote handed the reins to another friend and self-made entrepreneur, Wayne Huizenga Under Huizenga, Republic has aggressively expanded. And as Republic's vice chairman De Groote was on

hand at this week's announcement that Republic has offered to buy. ADT for \$50n. The big loser in De Groote's deals has been the Canadian company he led for more than 30 years. Soon after he left, Lakillaw's

management became embroiled in an acrimonious corporate That unhappy episode culminated in Laidlaw's selling its 24 per cent stake in ADT earlier this year for \$14.40 a share; Republic's offer values ADT at a cool \$25.

All yin, no yang Two steps forward, one pace back. The Chinese foreign ministry has decided that holding bilingual press conferences (in English and Chinese) is a mark of unseemly deference to old colonial ways. From September, all will take place solely in Chinese

This will certainly come as e shock to the many foreign hacks whose grasp of Chinese is not profound. Instead of thinking the foreign ministry merely inscrutable they will now find it's also become incomprehensible.

Safra sighting

■ Edmond Safra, one of the world's better known, least seen bankers, has placed a hefty bet on Monte Cario. His bank, Safra Republic Holdings, has moved into Aristotle Onassis's old offices on Monaço's Avenue d'Ostende, next door to the Hotel Hermitage. Old Monte Cerlo hands will remember the address. It's where the late Greek shipping tycoon used to canoodle with Maria

Callas. These days, recession-hit Monte Carlo lacks its former buzz; all the more intriguing that Safra, 64, is betting on its becoming e

profitable financial centre. On Sunday night, he made something of a splash, taking over the Monte Carlo opera house and hiring an unusual diva, Baroness Thatcher, as star performer. She had nothing new to say but the audience - whose net worth probably exceeded Monaco's gross national produuct - lapped it up.

Nor is his new bank a brass plete affair; it boasts e decent-sized dealing room and e staff of about 50. Safra says banks need to get closer to their wealthy clients and not wait for them to fly to Geneva or Zprich. Hardly a revolutionary idea, but then nothing in hanking ever is. The only difference with Safra is that he likes to bet on outsiders such as Guernsey, Gibraltar and Lugano. Based on past performance, Monte Carlo should come up trumps.

Bang bang Lebed Alexander Lebed wants extra powers to deal with Russia's security problems. He says that in his war against crime "we'll shoot people, but reasonably, with minimal losses for the law enforcement bodies, and only those people who refuse to be persuaded". Sounds like the good old days are just around the

# Ginancial Times

#### 100 years ago

Mr. Rhodes's Resignation Bulaweyo: At a mass meeting beld here today to protest egainst the action of the British South Africa Company in accelerating Mr. Rhodes's resignation, the following resolution was passed: "This meeting protests upon the grounds. (1) that the past services of Mr. Rhodes should have ensured his retention of office; (2) that his withdrawal seriously prejudices the Company in the eyes of the people as well as the best interests of British investors: and (3) that the more rapid development of the country that the colonists had the right to expect will be retarded in the event of Mr. Rhodes'e withdrawal from the Colony

50 years ago Rail Holders' Referendum

Every post yesterday brought large numbers of applications for membership to the British Railway Stockholders Union and the L.N.E.R. Stockholders Association, following the appeals of the Boards of the four main-line railways for a mandate from the stockholders for their anti-nationalisation policy.

The union secretary said the two days' returns suggest the widest realisation of the dangers of nationalisation not only to stockholders themselves but also to industry and the nation.

LAWYERS FOR BUSINESS



# Japan allocates \$155bn for research spending

The Japaneaa government yesterdsy sdopted a "master plan" to allocate Y17,000bn (\$155bn) to science and technology over the next five years, a substantial increase in state spending on basic research.

The scheme aims to overcome the reputation of the Japanese as great developers of other people's ideas but poor innovators. The government's science and technology agency believes the counserious competitive handicap. The nation's technology is currently in its most severe condition in recent years," its report

The agency says the Japanese R&D structure's main deficiency is the domination of public research laboratories by senior lifetime employees. The country's respect for seniority still takes precedence over promoting the

best young scientists, it says. It proposes an overhaul of the research career system, to to allow state-employed researchers to take second jobs in the private sector, a common practice in the west.

"Japanese society is very con-servative and this is especially true in R&D. It is very important to change and to improve researchers' conditions," said Mr Shizuo Hoshiba, s senior agency official and the plan's deputy

The plan would lift statefunded research spending to US and European levels of about 1 per cent of gross domestic prod-nct. But officials admit actual spending might fall short of the target because the finance ministry, keen to curb the budget deficit, retains control over the annual research budget.

If the funding target is met, the plan would represent a 5.8 per cent increase in research spending compared with the past five years. It proposes that spending should rise by just over 12 per cent a year until 2000, to reach Y4,300bn annually. That would

Mr Hoshiba said spending would focua on training, co-operation between research projects and the purchase of equipment and computers for the government's research laborato-

Currently, 80 per cent of Japan's \$130bn-a-year science and technology apending is carried out by the private sector - with nearly all devoted to applied, rather than basic research.

An ontline of the plan was adopted by the cabinet four years ago, and has since been the subject of s fierce debate with the finance ministry. The ministry resisted setting a numerical tar-get for research spending without a clear idea of what the projects would entail in the event, the finance ministry's assent was won by a compromise, m which it has the right to review research spending annually in the light of the government's financial condition.

Japan throws money at research,

# Thai bank governor quits after financial scandals

yesterday, bowing to sharp pub-lic criticism of his role in a series of financial scandals over the

entire career at the central bank and had been governor for the past five years, was regarded as a forceful economic manager. But recently his political motives and professional integrity came under

Exchange Commission

Mr Ekamol, who was also deputy governor of the central bank, was seen as a potential rival to

His loss of credibility also ren-

fully resisted calls from prime minister Banharn Silpa-archa to lower interest rates but he appeared to relent over the past week as his political strength

ers Bank, two of the country's largest commercial banks, greeted Mr Vijit's resignation with announcements that they would immediately cut some lending rates.

resignation was a positive step in stemming the decline of tha bank's credibility, its continued independence could be ensured only if the government chose a tough and strong-willed replacement. But this was unlikely, analysts cautioned.

Chief falls from grace, Page 5

Continued from Page 1

banking business after J.P.Morgan of the US. Its net income would have been \$1.2bn in 1995. CS said the changes had been discussed since the end of last year and were not related to the failed UBS merger.

Mr Hans-Ulrich Doerig, vice chairman of Cradit Suisse, becomes chief executive of Credit Suisse First Boston in an apparent attempt by the Swiss to tighten their grip on their vola-tile international investment banking subsidiaries. Mr Allen Wheat, president and chief operating officer of CS First Boston, becomes chief operating officer. Mr John Hennessy, chairman of CS First Boston, is retiring from

# Digital jobs

Continued from Page 1

"intact". "We expect to remain profitable," he said. "We will be

Mr Palmer said Mr Enrico Pesatori, general manager of Digital's Computer Systems Division and a vice president of Digital, had resigned with immediate effect. Digital's core businesses, which include high performance computers and its services operations, remained strong with double-digit sales growth.

In Europe, Digital's sales fell about \$150m sbort of expectations in the fourth quarter, Mr Palmer said. Digital'a European operations would also be cutting jobs, mostly in administration and support areas. Of the 7,000 job losses over the next year, about half are expected to be in Europe. Digital now has a worldabout half its peak in the 1980s.

**Europe today** 

Unsettled conditions will prevail throughout the British Isles. Scotland will have rain and strong easterlies are expected in northern regions. Southern regions of England, Wates and Ireland will have patchy cloud with showers. Southrly winds will be strong in the Irish Sea and a fresh breeze will blow along the east coast of England. Western and central France and the Benelux will have rain as an active front associated with low pressure in Scotland sweeps eastward. The rain will spread across western and northern Germany in the afternoon. A weak ridge of high pressure will bring dry conditions with sunny spells to eastern Europe. Thunderstorms are likely near a front sweeping east across Romania and the Ukraine, as well as western parts of Russia. The Mediterranean will be sunny.

# to build hotel chain

erties," he said.

The 50-50 hotels joint venture

was constituted by Cuba's Gran Caribe and one of Mr Berukoff's

companies, Wilton Properties, which is registered in the Britisb Virgin Islands. The Canadian-

Cuban venture, called Vancuba

Holding, plans to build 4,200

hotel rooms over the next decade,

"I see it as a long-term invest-

ment," Mr Berukoff said, adding

he viewed Cuba as a growth mai

ket for tourism. He said the proj-

ected rate of return on the invest-

ment was "more than adequate"

One of the 11 planned hotels

would be built in Havana and

two on Cuba's Isle of Youth,

where one of Mr Berukoff'a com

panies, Miramar Mining Corpora-

tion, already has an advanced

gold and silver project. Three

more hotels were planned on the

Cuban offshore tourist island

But the bulk of the project

comprising five hotels, would

concentrate on the development

of s north coast beach site at

Jibacoa, some 50km (30 miles)

east of Havana. This would

include s golf course, ranch,

marina and cruise ship facilities.

Cayo Largo del Sur.

FT WEATHER GUIDE

but declined to give details.

distributed in 11 hotels.

A Canadian entreprensur is undertaking a \$400m joint venture to build 11 tourist hotels in Cuba in the island's biggest foreign investment deal since the US introduced measures in March to discourage foreign busi-

ness there. Mr Wally Berukoff, who runs a group of mining, property and other companies and already has investments in Cuba, signed the deal with Cuba's state hotel cor-

poration Gran Caribe. The 10-year project is the big-gest planned joint venture investment announced so far in Cuba's growing tourism sector. It will also be the largest investment in Cuban tourism by Canada, which, along with Spain and Mexico, is a significant investor ment in Cuba has been heavily concentrated on mining, although at least two Canadian

companies manage Cuban hotels. The announcement was a further signal that some determined foreign investors do not intend to be put off by Washington's Helms-Burton law. The US legislation threatens penalties against foreign companies which invest in property expropriated from Americans in Cuba following the

1959 revolution. Canada's government last month proposed retaliatory legislation which would allow Canadians to countersue in Canadian courts to recover any damages which might be awarded against them in US courts under the Helms-Burton law.

# be double the level in 1992, when Credit Suisse | Canadian group in \$400m Cuban deal

Mr Berukoff, who is based in Vancouver, has interests in two advanced gold projects in Cuba and has also invested in a Cuban-Canadian biotechnology joint venture. He said his lawyers had checked the proposed hotel sites in Cuba, which were subject to no known US claims. "We have been very careful not to deal with confiscated US prop-

Mr. Vijit Supinit, the governor of Thailand's central bank, resigned

past year. His resignation was welcomed by the domestic and foreign financial communities, which had lost faith in his ability to maintain the Bank of Thailand's much admired independence. Mr Vijit'à departure was widely expected and a successor is expected to be announced early

Mr Vifit, who had spent his

He played a significant role in the sacking of Mr Ekamol Khiri-wat as head of the Securities and

dered him impotent in the face of increasing political pressure on the bank to abandon its restrictive monetary policy.

Last year, Mr Vijit had success

Bangkok Bank and Thai Farm-

Mr Vijit was further damag

when it was revealed that be had soft-peddled months of warnings that a medium-sized commercial bank, the Bangkok Bank of Commerce, was engaged in dubious lending practices.

The government was forced to take over the bank last month in

Mr Vijit allowed the bank to give unsecured loans to prominent politicians to buy land that was then overvalued by as much as 10 times and then used as security for new loans from the

Commerce executives or employees have been indicted on charges of fraud.

Analysts said while Mr Vijit's

#### THE LEX COLUMN

# Credit's crunch

Credit Suisse, the oldest of Switzerland'a three big banks, has long been due for a facelift. April'a embarrassing failure to bounce higger rival UBS into a merger seems to have finally galvanised its management into action.

Yesterday's rationalisation sweens away a tortuous group structure under which stand-alone businesses overlapped and even competed with each other. The new organisation each other. The new organisation places greater emphasis on asset management and private banking - relatively stable and profitable areas - by assigning them equal divisional status with retail and investment banking. There is nothing innovative in this: SBC put an almost identical structure in place after the takeover of SG Warburg. But Credit Suisse has also found itself a highly-rated new chief execu-tive in Mr Lukas Mühlemann, a former management consultant who has won plannits for restructuring insur-

ance group Swiss Re.

Mr Mühlemann has plenty to get his teeth into. Due to 1993's disastrous acquisition of Volksbank, Credit Suisse is losing money in Swiss retail banking even though it is market leader with a 30 per cent share. Yesterday's job cuts and branch closures, which should yield the bulk of promised savings totalling Sfr700m (\$560m.), are the first serious attempts to cut

costs at home. The real challenge, though, is to sort out Credit Suisse First Boston, the investment banking arm. Although CSFB should be a very valuable asset as the only European bank with a real footbold on Wall Street, its returns have been mediocre. This reorganisation beefs up CSFB by bringing the profitable derivatives unit under its aegis and uniting commercial and investment banking, a move which Mr Rainer Gut, chairman, has always fought against. Whether it will help CSFB to match rivals like Goldman Sachs or Morgan Stanley for profitabil-ity is much more doubtful.

#### Digital Equipment

Digital Equipment is back to its bad old ways. Barely a year after the computer group had apparently turned the corner, it has unveiled another huge restructuring charge, Mr Robert Palmer, chairman and chief executive, may point out that the restructuring charge at \$475m and the associated 7,000 job cuts are smaller than some other hits Digital has taken in recent years. But it is still a substantial blow to the credibility of both the company and Mr Palmer.

The root cause of Digital's problems

80

is fairly basic: it badly forecast mand for personal computers at the end of last year with the result that too many of its PCs were stuck with distributors when sales and prices fell earlier this year. Tougher competition in the PC business is, of course, something that all manufacturers have had to face. But Digital has been particularly poor at responding to the chal-lenges. That probably reflects the fact that it has never been adept at making

money in commodity businesses.

Looking forward, Digital's decision to cut further its presence in PCs seems sensible. Its other business notably providing computer services and making "servers", powerful com-puters that sit at the heart of networks - are more profitable. Moreover, Digital has competitive advantages in these areas as a result of its strategic alliance with Microsoft and Alpha, its fast microprocessor. But even these markets are becoming increasingly competitive. Unless Digital rapidly demonstrates that it is back on the recovery track, the few advantages it still possesses will be

#### Mastercard

Mastercard certainly knows how to pick a fight. Just a matter of weeks after the European competition commissioner warned fellow credit card company Visa against stopping its member banks from issuing rival cards in Europe, Mastercard has decided to try the same trick in the US. Of course, it has a simple defence. Visa has already quietly got away with such a practice in the US, on the basis that it it is rightfully defending its brand. However, since American Express or other card issuers have to build their own brands and computer

sts earning\* and service networks, there is little strength in the argument that the would be cashing in on Visa/Master. card's investment. And it will be inter-esting to see whether the US govern. ment is prepared to be painted as a less vigorous anti-trust policemen

American Express should feet immensely flattered. The moves by its competitors must be interpreted as response to its new strategy of trying to expand its distribution by using a network of banks - many thousands of which are members of either Visa or Mastercard. Visa, however, will probably be less impressed. Mastercard's latest move must inevitably encourage a degree of scrutiny at Visa's own US arrangements. which is unlikely to be all that welcome.

Orange has yet to face a real squeeze. But some of the enthus forecasts that accompanied the cellu-lar operator's March flotation may have to be scaled back. For the second quarter running, net growth in cm-tomers has fallen. The decline may not be large: 85,000 customers were added in the three months to end-June, down from 108,000 in the previous quarter and 115,000 in October-December less year. But the strong momentum that Orange had developed in the run-up to

its flotation has evaporated.
Two things have happened. First overall growth of the UK cellular man ket has slowed: there were fewer than 300,000 net new customers in the last quarter - a drop of nearly 40 per cent compared with the same period of the previous year. There is, as yet, no convincing explanation for this. But if the slowdown persists, the industry will either have to cut prices to boost sales or to live with less rapid growth than once seemed likely. Either way, Orange would suffer more than Vodafone, its main quoted rival: not only is Orange, which is still loss-making effectively a geared play on the Uk cellular market; Vodafone's fast-growing international business provides a cushion.

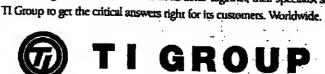
The second development has been a slight fall in Orange's share of net new customers - from about 33 per cent in the first quarter to 29 per cent in the second quarter. The drop should not have been surprising; after all, Voda-fone and Cellnet have only recently brought their tariffs down to cut Orange's pricing advantage and stepped up their marketing campaigns. Even after the recent fall, the Orange share price could be peeled back further.

Comment of the State of the Sta

# a new high flier.

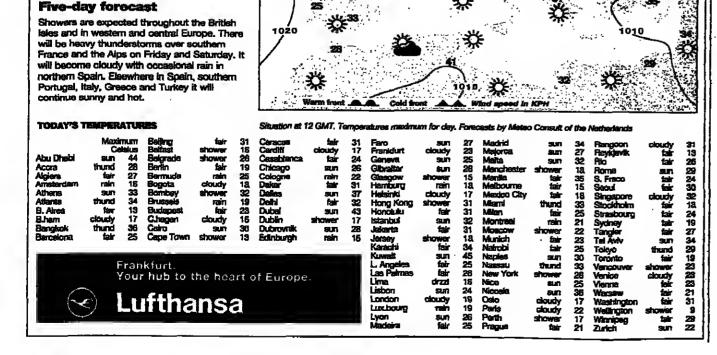
Indonesia's state-owned IPTN celebrated its 20th anniversary with the debut at Indonesia Air Show '96 of the twin-engined N250, scheduled to enter commercial service next year.

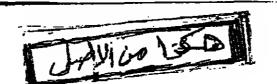
The N250 is the world's only fly-by-wire regional turbo-prop and, at 330 knots, one of the fastest. Its range is 800 miles and stretched versions with up to 72 seats are already under development. Key equipment includes landing gear supplied by Messier-Dowty (TI Group's joint venture with SNECMA) and Dowty propellers and hydraulics - a package worth over US\$200 million across the expected life of the programme. With our help, the N250 is a real high flier. Dowty is one of Ti Group's three specialised engineering businesses, the others being Bundy and John Crane. Each one is a technological and market leader in its field. Together, their specialist skills crable



For further information about the TI Group, contact the Department of Public Affairs, TI Group plc, Lumbourn Court, Abingdon, Oxon OR14 IUH, England.

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"Japan, Inc. has no magic management system There is simply no substitute for a conscientious work force." **KROTHS** 

**FINANCIAL TIMES** 

# **COMPANIES & MARKETS**

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Wednesday July 3 1996

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#### Morgan Stanley boosts earnings

The continuing strength of financial markets helped Morgan Stanley, the investment bank, to nearly double earnings per share in its second quarter to May 31. Fully diluted earnings per share for the quarter were \$1.75, up from 91 cents in the same period of 1985, and from \$1.57 in the first quarter. My Philip Duff, chief financial officer, said "the marting environment has been about as ideal as

Olivetti may name new chief tomorrow Directors of Olivetti, the Italian computer group, could name a replacement for Mr Corrado Passera, the outgoing chief executive, as early as tomorrow following Banco Ambrostano Veneto's announcement yesterday that Mr Passera will be the bank's new chief executive. The front-runner to replace Mr Passera is Mr Francesco Caio, chief executive of Omnital Pronto Italia, the mobile phone company in which Olivetti has a 41 per cent stake. Page 14

Gloomy start for Stena Line Stena Line, the Swedish ferry company, has had a gloomy start to the summer season. Stena, the world's largest ferry operator, was forced to issue a profits warning last month because of the effects of competition on the English channel from Eurotunnel, and delays in introducing its High-speed Sea Service (HSS) vessels on the Irish Sea. Page 14

NYSE targets overseas stock The New York Stock Exchange has underlined its global ambitions by recruiting Mr Georges Ugeux to the new post of group executive vice-president, international. However the exchange has dropped plans to begin trading in non-US companies' shares in their home currencies. The intention had been to start a pilot scheme this autumn but the plan has been put off, with no firm date set for a launch.

John Fairfax picks chief executive John Fairfax, Australia's leading newspaper publisher in which Mr Conrad Black, the Canadian media tycoon, holds the largest single stake, announced it was appointing Mr Robert Muscat as chief executive. Mr Muscat is currently chief operating officer at News Limited, the Australian arm of News Corporation, the media and entertainment group headed by Mr Rupert Murdoch, Page 16

**Cookson acquires Camelot Systems** Cookson Group, the UK industrial materials company, strengthened its presence in electronic com-ponents by acquiring Camelot Systems, the US dis-penser manufacturer, for up to \$100m. The UK group said the acquisition would make it the world's only integrated manufacturer of electronic materials, laminates and circuit board equipment for the semiconductor industry. Page 17

Dutch give zinc smelter more time The Dutch authorities have agreed to give Pasminco of Australia more time before it has to stop dumping poisonous jarosite waste at its Budel zinc

7 Mercury One-2-One

# **Boeing and GE enter** corporate jet market

By Michael Skapinker. Aerospace Correspondent

Boeing and General Electric. both of the US, yesterday launched a joint venture to build business jets capable of flying from New York to Tokyo and

London to Johannesburg.

The joint venture comes at a time of intense competition in the executive jet market between Bombardier of Canada and Gulfstream Aircraft of the US, which are also producing aircraft capa-

ble of flying 6,500 miles.

Boeing said yesterday that its jet, based on the new Boeing 737-700, would be higger than either the Gulfstream V or Bombardier's Global Express. Mr Philip Condit, Boeing chief executive, said the aircraft would also be more flexible than any of its rivals.

"Customers will be able to configure their airplane for each trip as a meeting centre, communication post, travelling hotei or

employee transport," he said. The aircraft will be able to accommo-

The joint venture, to be called Boeing Business Jets, will deliver its first aircraft at the end of 1998. The first customer will be GE which has ordered two of the aircraft for its own use. All the aircraft will be powered hy CFM56 engines produced jointly by GE and Snecma of France. Boeing says this is the first time it has decided to produce

jets specifically for the corporate market, although some of its aircraft have been converted for use by companies and wealthy indi-Most of the Boeings used as corporate jets were bought second-hand from airlines. Boeing saye 51 of its aircraft are

being used by businesses or gov-ernments. Among these are 14 Boeing 747s, which can carry more than 400 people. Boeing and GE's decision to enter the corporate jet market

since the early 1980s. In 1981, 500 jets were sold worldwide, according to the Washington-based National Business Aircraft Association. Sales dropped sharply from the mid-1980s, and have averaged between 200 and 250 a year over the past decade, the association says.

Most operators of business air-craft - both jets and turboprops - are in the US, which accounts for 10,000 of the 16,000 aircraft in service worldwide. Texas has more business air-

craft - 1,000 - than any other state, with California second, on 774. Washington DC boasts 362. Europe accounts for 12 per cent of business aircraft, while South America has 9 per cent of the worldwide fleet.

The association says husiness aircraft worldwide have an average age of 10 years. Sales of new jets account for iess than 20 per cent of all busi-



# Crédit Lyonnais to securitise FFr40bn of loans

Crédit Lyonnais, the state-owned French bank, is to announce today details of a securitisation issue to help increase its financial flexibility et a time when it is facing the prospect of substan-

The bank is to launch a securitisation of about FFr40ho (\$7.69bn), representing one-third of the loan it made to e company created by the French state as part of its restructuring plan approved last year.

The Issue, called Cyber-val 07-96, will be the largest securi-tisation carried ont oo the French market and represents an ambitious expansion in the use of the technique by Crédit Lyonnais, which has anoounced a number of more modest operations over the past two

Under the scheme, a proportion of the loans it has made wili be held in a special vehicle with a high credit rating, and sold in the form of shares to external investors. The operation wili provide the bank with cash to help it manage its balance sheet.

The loans were made to EPFR a company guaranteed by the French government - which in turn has made a ioan to Consortium de Réalisations, an organisation set up to sell more than FFr135bn in poorly performing assets removed from Credit Lyonnais' balance sheet during its restructuring. At the end of last year, the size of the total loan was FFr124bn.

Bank executives are still discussing with the French government ways in which the structure of the rescue plan can be altered. However, ministers are keen to avoid any change requiring new approvals from European Union competition authori-

In the meantime, Crédit Lyonnais is using the securitisation operation to help increase its room for manoeuvre at a time when falling interest rates and the below-market rates of interest on its loan to EPFR are likely to drag it into substantial iosses for 1996.

Last month, the hank announced a FFr5bn securitisation of ioans to pharmacists called Titraphar 06-96, which was until now the largest such issue in France. It has already carried out operations totalling FFr6.1bn in 1994 and FFr4bo in

# BAM may shun South African broker

By Norma Cohen and Philip Gawith in London

Baring Asset Management, one of the higgest foreign investors in South African shares, is considering suspending share dealing through Nedcor, South Africa's fourth-largest hank, after the bank disavowed a research report critical of one of its largest corporate clients.

Nedcor had written to its broking clients criticising its own research report, which caused BAM's Mr Michael Power, head of African and Middle Eastern equities, to protest at "the obvi-

ous violation of Chinese walls". He said his company was considering suspending the purchase of South African shares through Nedcor's brokerage. The analyst who wrote the crit-

is a respected expert on Zimbahween and Zambian shares and BAM said it was anxious to continue receiving his research. Mr Power wrote to Nedcor after

ical report, Mr Michael Coulson,

receiving a letter of June 28 signed on behalf of Mr Richard Laubscher, Nedcor's chief executive, noting the "negative picture of South African Breweries" in a June 7 research report. "We dissociate ourselves from the conclusions reached and sentiments expressed in the report," said the letter. Nedcor has since ceased distributing copies of the report, which had urged investors to sell their shares.

The report said South African Breweries held a monopoly in its home beer market and offered customers a limited range of products. It also said the com-pany would be a "worthy target" if the government decided to break up the monopolies which

grew up under apartheid.

The report, which noted that SAB shares are widely held by

said: "The clear beer monopoly enjoyed by SAB in South Africa is unnatural and restricts consumer choice. The ANC dominated government has railed against the concentration of economic power in SA but has done little to break up any of the historic business concentrations. SAB would in our view constitute

foreign institutional investors,

a worthy target." The South African government is currently drafting competition and antitrust policy.

Nedcor said some opinions expressed in the report "are a misinterpretation of the circum-

tors have said that objective research on South Africa is cru-cial if they are to participate heavily in that market. The pattern of cross-holdings by South African companies has limited transparency and liquidity and makes valuations difficult, inves-

tors claim.

stances that have developed in

the South African economy over

a great many years".
UK and US institutional inves-

BAM is one of the leading institutional investors in emerging markets, particularly South Africa, and has £26bn of assets under management worldwide.

# SmithKline Beecham agrees \$90m gene deal

By Daniel Green in London

Heavy investment in gene research by SmithKline Bee-cham, the UK drugs company. was vindicated yesterday by deals worth at least \$90m to sell some of the results to two other

drugs companies. Schering-Plough of the US and Synthelabo of France will pay \$55m and \$35m respectively over

and Human Genome Sciences, its tion is unlikely to put products US gene research partner. .

Those payments would be sup-plemented by royalties on prod-ucts generated by the informa-tion, and by "milestone payments" which fall due as drug development proceeds.

Three years ago, SmithKline paid \$125m for its stake in HGS, now standing at about 7 per cent. The price was criticised by some five years for a genetic database in the industry as excessive. built by SmithKline Beecham Even today, the HGS collabora-

on the market before 2005. SmithKline and HGS said they wanted the new partners because

there was so much potentially useful information emerging from their research. Mr William Haseltine, Human Genome Sciences' chief executive, said: "We and SmithKline

Beecham have created more concrete opportunities to develop pioneer drugs than either party alone or together can use."

But he acknowledged it would be years before the information would be turned into products. The research, genomics, looks at the chemical structure of DNA - a person's genetic hineprint. Each of the 70,000 to 100,000 genes in human DNA triggers the

production of a protein. The information HGS and SmithKline are selling consists of details of the genes and their proteins. Schering-Plough and Synthélabo, together with Tak-

eda of Japan, will use that information to try to develop drugs that interfere with or promote these proteins' activity.

SmithKline and HGS are also

changing their relationship. Until now, SmithKline has had first refusal on potential drugs identi-fied by the two. Now, HGS would be able to "designate its own proteins for development" said Mr Haseltine.

HGS shares rose \$% to \$36 in early trading yesterday.

# 7 Microsoft

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# **Barry Riley**

# How Italy knocked out Germany in bonds



13

self-satisfied G7 communiqué at brated, by implica-tion, the recovery of the US dollar which finaliy breached the 110 yen level yesterday. It has now risen over the past year by nearly 30 per cent against the yen and by 10 per cent against the D-Mark.

Meanwhile the OECD's halfyear report has painted a similarly benign broad picture. Its Member states' overall economic growth is to accelerate gently from 2.1 to 2.5 per cent between 1996 and 1997. Inflation, however, will stay close to 2 per cent.
It all seems good enough for

the policymakers to be able to sneak away for an early holiday. Yet we can find some cracks in the facade. Unemployment in continental Europe is stuck at around 10.5 per cent, with little relief coming next year, according to the OECD.

The fiscal projections are quite daunting too, with public sector deficits still running at above 4 per cent of GDP on average for Europe next year. European countries' average gross public sector debt will climb to 77 per cent of GDP - notwithstanding the OECD's generous assumption that their deficit reduction mea-sures will actually work.

Still, the past year can be reckoned to be a success story for international co-operation, both between the US and Japan and within Europe - where an ulti-mate version of harmonisation, monetary union, is already being celebrated by the financial mar-

co-operation has been reflected in the government bond markets by a revival in the appetite for risk. Risky currencies and risky bonds have enjoyed an excellent run as spreads have narrowed.
According to J.P. Morgan, only

Italy, Spain and Sweden delivered clearly positive local currency bond returns in the first half of 1996 within Europe, and if you add in the currency effect

The shift from confrontation to co-operation has been reflected in government bond markets

Italian BTPs outperformed German bunds by 20 per cent during the six months.

US Treasuries and bunds have underperformed, the latter partly because the German government, whatever the Bundesbank thinks, seems ready to absorb some of the financial risks of the weaker EU economies.

The markets' appetite for risk is a natural consequence of a more complicated; accelerated stronger liquidity flow. Japan has been pursuing an aggressively loose monetary policy and Germany has followed some way down the same road. G7 broad money growth year-on-year has accelerated from about 2 per cent early in 1995 to more than 5 per

The shift from confrontation to 12 months in dollars, but by 27 per cent in D-Marks and by 49 per cent in yen. Against the eccommodating international monetary back-

ground the UK has been free to pursue some ill-disciplined pre-election policies – including a shrug of the shoulders at 10 per cent broad money growth - without suffering any currency weak-ness. But the Emu-free UK government bond market has missed out on the global quest for risk.

Now the year's second half offers a potentially more testing climate. Short-term interest rates are likely to be raised in the US and Japan before long, and although Germany is much further away from such a step the Bundesbank does appear to have concluded that D-Mark rates need not go any lower.

Tighter money will bring a change of climate. There is scope for a rise in real bond yields, and not just in US Treesuries which have home the brunt of the correction so far.

Typically, the impact of tightness is not evenly spread but is focused on riskier areas. This could be especially bad news for some of the racier investments such as Latin American Brady bonds. In Europe the picture is economic growth will make Emn more credible because more countries will get close to the Maastricht criteria. This will help the high-yielders.

Equities need not fear the monetary consequences of more rapid growth so much, but Wall Street has been very sensitive to interest rate expectations recently. Equity markets have also, of est rate expectations recently. course, fed voraciously on easy money. The world market has their gains, do not feel anything risen by 16 per cent over the past like so smug as the politicians.

This announcement appears as a matter of record only

£15.0 million Management and Employee Buyout of



Scotland Track Renewals Company Limited

Equity provided by: Hambro European Ventures II **Abtrust Scotland Investment Company British Linen Securities Limited** 

Senior debt and banking facilities provided by: Bank of Scotland

> Lead financial adviser: Coopers & Lybrand

Transaction structured and led by: Hambro European Ventures Limited



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February 1996

#### COMPANIES AND FINANCE: EUROPE/INTERNATIONAL

# Stena goes for rapid solution to profits gloom

The troubled ferry operator is trying to launch its latest weapon in the high-seas battle for passengers

he rain splashing down on the huge new high-spead crouched at its berth in a slategrey Gothenburg harbour last weekend neatly matched the mood of what has been a gloomy start to the all-important aummer season for Sweden's Stena Line.

The world's largest ferry operator was forced to issue a profits warning last month because of the effects of unrelenting competition on the English channel from Eurotunnel, and delays in introducing its much-trumpeted High-speed Sea Service (HSS) is on the Irish Sea.

Profits this year are now forecast to be below the SKr201m (\$30.2m) pre-tax surplus earned last year - which in turn was less than half the level of profits in 1994. The difficulties are the more irksome to Stena because they come just as the company is entering an offensive phase of new investment and capacity increases after three years of financial consolidation.

But Mr Bo Lerenius, Stena's chief executive, is adamant the company is not about to change course from its strategy of concentrating on the ferry business - despite growing competition from bridges and tunnels and threats such as the European Union's plan to end on-board duty free sales

in three years. Stena operates 35 ferries on 15 routes around Britain and Scandinavia. This year, it has already introduced one HSS and one new conventional ferry. By the end of the year.

Krupp, the leading German

steel and engineering group,

which has undergone consider-

able restructuring in recent

years, yesterday said it would sell its Mak Maschinenbau

snbsidiary, which specialises in diesel engines, to Caterpil-

- The two companies have

signed a letter of intent and

Krupp said yesterday they

expected to reach a final agree-

By Judy Dempsey in Berlin

Germany's largest gas distribu-tion group, expects to report operating profits this year for

the first time since reunifica-

tion. Mr Klaus-Ewald Holst,

chairman, said yesterday VNG

would move out of the red by

1997. despite the slowdown in

The optimistic forecasts are

linked to a sharp rise in gas

the region's economy.

Verbundnetz Gas,

lar, the US group.

due to be delivered, with a Stena Line third large HSS due early next

year.
"Of course, it is a problem when a number of [adverse] things happen at one time. talking about a lot of money and Eurotunnel hit us with a worse attack than we anticipated. But we will continue to stick to our strategy. No way will we change our plans to introduce new tonnage. The toughest challenge to

Stena at present is on the English Channel, Since Eurotunnel opened a year ago, it cent share of the market -partly through offering rock-bottom prices which have squeezed out the price advantage the ferry operators hoped would be the chief weapon in their defences on the route.

Enrotunnel delivered another blow just before the current summer high season with another round of price cuts. "From our point of view, it was very dramatic. It means the whole price level is 50 per cent of what it was before," says Mr Lerenius.

At the same time, Stena has been adding vessels, taking its fleet from three to five on the Dover-Calais ronte, following the end of an earlier co-operation it had with the French operator SNAT.

The combination of lower prices and rising operating costs forced Stena to join Britain's P&O, the biggest ferry operator on the route, in urging the British government to relax rules preventing co-operation between the ferry

reshaped in recent years in an

effort to focus activities on

larger diesel engines for ships.

The company also makes

smaller engines for electricity

generators and had until

recently made parts for the

Leopard II tank. Krupp declined to comment

on an eventual sale price for

Mak, saying that the due dili-

gence process was to start

immediately. Mak made unspe-

sales, and in send-out - the

distribution to households and

industry of natural gas, town

gas and domestic natural gas

produced at Salzwedel in the

eastern German state of

The company reduced its

losses last year, from DM26m

to DM1m (\$656.4m). Sales rose 20 per cent, from DM2.3bn in

1994 to DM2.76bn, and send-out

climbed 27 per cent, from 101bn kilowatt hours to 129.7bn KW/h

Saxony-Anhalt.

rupp said yesterday they spected to reach a final agreement in the autumn.

Mak, based in the northern Krupp overall made record net profits of DM505m last year on



Sales, SKr bn 1991 92 93: 94 - 95 - 96

capacity and prices on Dover-

Calais business and share reve-

to throw in the towel on the

channel. It is the world's busi-

est ferry route and is a fast

growing market: overall vol-

umes rose 20 per cent last year.

When prices stabilise, Mr Ler-

enius says Stena can be one of

at least two ferry operators he

believes can survive long-term

effort to win volumes you don't then back off. We have no

Selling Mak is a further step

in a wide-ranging overhaul at Krupp following its merger with rival steelmaker Hoesch

in 1998. As part of that process,

the Essen-based group said last

month it would sell its Oren-

stein & Koppel escalator activi-

ties to Kane, the world's third-

largest lift producer. It is still

looking for a buyer for O&K's

mining and construction equip-

Krupp said Mak had a size-

able share of the world market

for ships diesels but that this

was not enough to ensure its

"When you have put in the

on the route.

But Mr Lerenius is not ready

Stena is interested in a thought of doing that - or of "pooling" arrangement under which the operators would fix

selling any part of our husitena's second problem

this year has been delays in getting its impressive HSS craft into service. The second of these aluminium-built, jet-engine propelled giant catamarans should not still have been in Gothenburg last weekend, according to original schedules. It should have been in service on the Strangaer-Belfast Irish Sea route more than a month ago, to complement the first HSS, which also began late on the Dun Laoghaire-Holyhead run earlier this year.

either expanding MaK's

engine-making activities or finding a buyer which fitted."

Krupp said.
A sale to Caterpillar made

sense because of the US group

had larger diesel engine activi-

ties for lorries, ships and con-

The German group also said Caterpillar wanted to keep the

Mak name and to integrate the

company into Caterpillar's

engine activities. A merged

company would create the

world's largest maker of die-sels for ships.

struction equipment.

The process of testing and gaining full operational approval from the maritime authorities for the vessels has taken longer than Stena anticinated. But, the craft are a cornerstone of Stena's strategy

which may yet play their part

in the battle on the English

Operating margin, %

channel. Stena is spending SKr3bn on the five HSS craft - three with capacity for 1,500 passengers and 375 cars, and two smaller vessels to carry 900 passengers and 210 cars. They aim to combine the 40-knot speed of much smaller high-speed craft already used by many compa-nies with the capecity of a

large ferry. The big high-speed ferries offer key elements which Stena – the first ferry operator to invest in them believes will give it a signifi-cant competitive advantage. They cut journey times by as

much as half, enabling operators to charge premium prices. Prices on Dun Laughaire-Holybead are np to 30 per cent higher than for conventional vessels. But they have the capacity to gain big volumes. Mr Lerenius sees HSS vessels

playing a vital role in the future. With duty free set to disappear, and the advent of fixed links like Eurotunnel and the Sweden-Denmark bridgetunnel, the emphasis for ferry operators is going to move to getting passengers from A to B, rather than on what Mr Lerenius calls "creative travel".

Stena sees the present threeway split in its revennes hetween ticket sales, on-board sales and freight income shifting significantly in favour of the former and latter. On non-overnight routes (for the time being, at least, HSS craft have no cahins), high-speed, high-capacity vessels will come into their own, the company

This is why Stena is so anxions to get its first two HSS 1500 vessels into service. There was much pride among com-pany officials at the weekend in Gothenburg as they showed hundreds of curious visitors around tha gleaming, spacecraft like ship.

But there was also impatience to get the paying public aboard as soon as possible.

**Hugh Carnegy** 

#### **NEWS DIGEST**

# Rémy postpones release of results

Remy Cointreau, the French drinks group which is suffering from weak cognac sales and high distribution costs, has postponed the publication of its year-end results from vesterday until late this month. The group, 53 per cent-owned

yesterday until late this month. The group, 33 per cent-owned by the Heriard-Dubreuil family, gave no reason, but indicated that technical problems had delayed the accounts.

The company's shares closed yesterday at Ffr144, down FFr7 in the past two days, and heavily down from a peak of FFr265 in January 1994. It warned in late April that not profits for the year ended March would be slightly lower than the FFr276m (\$53.6m) of a year earlier. But they would include FFr212m in extraordinary gains from asset sales. Analysis expected it to harely break even at the pre-exceptional items expected it to barely break even at the pre-exceptional items level in the latest year. The company has said it would also maintain the dividend.

The strong French franc has hit Rémy's overseas operations. Cognac sales, particularly in east Asia, where Remy has tried to push through price increases to offset the franc factor, have fallen. Rising sales of its champagnes, such as Krug and Heidsleck, have only partly offset the decline. Analysis. thought the results delay might mean the company had suffered a further setback in a foreign market or, less likely, that it planned a financial or corporate restructuring.

The prime target for change is its extensive global distribution. Analysts said the group had too small a product portfolio to justify the cost. Remy was trying to broaden it by taking on distribution for other companies. It already handles Famous Grouse Scotch whisky from Highland Distilleries which has a cross shareholding in it. It recently took on Grand Metropolitan's brands in Singapore and Malaysia.

Roderick Oram, Consumer Industries Editor

# Tribune Group in \$1bn TV buy

Tribune Group, owner of the Chicago Tribune, is to extend the reach of its television station operations to more than 53 per cent of US homes with the \$1bn purchase of Renaissance Communications. The move will add six stations to the 10 already owned and make Tribune the biggest concern in the field, ahead of Westinghouse Electric. The acquisition is part of a strategy to reduce dependence on print media. Coming quickly after Westinghouse's \$3.9bn acquisition of Infinity group last month, it marks a further decisive stage in the rapid consolidation of US media and communications spirred by telecoms deregulation. Under new rules, broadcasting groups may now own systems able to reach 25 per cent of US homes, up from 25 per cent. Tribune's coverage will now span 11 of the main US TV markets and give It greater leverage in negotiations for programming in competition with competitors such as the cable companies and Christopher Parkes, Los Angeles

#### Pay-per-view Italian soccer

Italian soccer fans will get their first taste of pay-per-view television this antumn, when Telepiù, the Italian pay TV company founded by Mr Silvio Berinsconi, will start special live coverage of the Italian league for subscribers. Telephi, in which Mr Berinsconi's Fininvest group still has a 10 per cent stake, said yesterday it also planned to launch a 'video-on-demand" service.

The pay-per-view TV service will be available for individual games or in the form of a "season ticket" to all games of single clubs. Coverage will start in September with the top Serie A games and extend to Serie B from January, transmitted by Telepiù digital satellite television subsidiary. The season ticket for Serie A will cost L600,000 (\$326), plus L1.7m for the decoder, satellite dish and smart card for access to the

Mediaset, the Beriusconi media company set for stock market flotation later this month, has an option to buy Fininvest's 10 per cent stake in Telepid. The Rupert family of South Africa, and Kirch, the German media group, own about 33 per cent of Telepiù each, and are also the largest minority Andrew Hill, Milan shareholders in Mediaset.

illy structures

Swige retail benkung

#### St George out of Metway deal

St George Bank, the Australian regional bank, has effectively abandoned its efforts to acquire Queensland's Metway Bank for A\$820m (US\$644.8m). The bid, which was to have been implemented by a scheme of arrangement, failed to win sufficient backing from Metway shareholders last week. This appeared to clear the way for the Queensland state government's rival plan to create a regional "superbank" by merging Metway with two other government-owned institutions.

Nikki Tait, Spiney

#### Italian broking link-up cancelled

An Italian joint venture between broking house Akros Finanziaria and financial service group Sopaf, which owns brokers Pastin, has been called off. Mr Guiseppe Daversi, Sopaf director, said the plan to create a 50–50 venture to be called Akros Investiment, had been cancelled. Akros . ... shareholders this week opted for a capital increase rather than

#### Verbundnetz Gas sees return to black has invested more than DM2bn over the same period. in modernising existing pipe-The expectation of profits also appears to be linked to the lines and laying new ones. It VNG's heavy investment proplans to invest a further gramme in the five eastern states, as well as the switch by DML5bn until 2000. The investment programme was also designed to shift con-

households from brown coal or lignite - to gas.
VNG was sold in 1992 by the sumption away from brown coal. Until 1990 it was the main Treuhand privatisation agency to several German gas compa-nies, including Ruhrgas, the biggest shareholder with a 35 source of energy to industry and domestic consumers, with only 6 per cent of the latter linked to gas, compared with 66 per cent to brown coal Mr per cent stake. Since then it Holst said more than 29 per cent of households were now receiving gas. VNG expects gas consumption by industry to rise from 21bn KW/h in 1991 to

# Caterpillar to buy Krupp diesel unit | Caio likely to be head of Olivetti By Andrew Hill in Milan

Directors of Ollvetti, the Italian computer group, could nama a replacement for Mr Corrado Passera, the outgoing chief executive, as early as tomorrow following Banco Ambrosiano Veneto's announcement yesterday that Mr Passera will be the bank's new chief executive.

The front-runner to replace Mr Passera is Mr Francesco Caio, 38, chief executive of Omnitel Pronto Italia, the mobile phone company in cent stake.

Mr Caio is a former management consultant with McKinsey and former assistant to Mr Carlo De Benedetti, the group chairman and joint chief axecutive, whose family con-trols the company through Cir, a qooted holding com-

If be takes the job, Mr Caio will have the responsibility of completing Olivetti's transfor-mation into a broad-based information technology and telecoms company, and ensuring that the group meets its 1996 target of ending five consecutiva years of net losses.

Ambroveneto, one of Italy'a largest quoted banks, said it would finalise the appointment

of Mr Passera, 41, to the vacant post of chief executive, at a board meeting towards the end

Mr De Benedetti announced unexpectedly last week that Mr Passera, one of his closest collaborators over the last 11 years, had received an alternative job offer. Mr De Benedetti indicated that the board would name a replacement before the end of the month. Olivetti would not comment yesterday on the potential successors or the timing of the meeting.

The news of Mr Passera's departure has hit the comma ny's share price over tha last few days, as he was one of the architects of Olivetti's recovery plan, and head of the newly formed personal computers subsidiary. Yesterday Olivetti's

shares recovered slightly to close up L10.5 at L832.1. Mr Bernhard Auer, a former senior executive with Digital Equipment of the US who joined Olivetti last year, is likely to take charge of the PC business, with a mandate to proceed with the rationalisa-

The PC company has already announced that it broke even in February and March, and is expected to indicate secondquarter figures before the end

# about 50bn KW/h by 2000.

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# Rabobank builds private equity investment side

By Richard Gourley in London

Rabobank, one of the Netherlands' largest banks, has bought Gilde Holdings, a prominent continental European venture capital company, for an undisclosed sum in a move that will substantially increase its private equity investment activities.

The bank has committed to putting up to FI 500m (\$292m) into a new fund to be managed by the Gilde team for investment in transactions that emerge from its branch net-

At the moment the bank has only FI 80m invested in the Rabobank is also underwriting up to Filhn of capital for two other funds, Fi 800m

invested in management buyouts and Fl 200m in information technology companies. Earlier this month Rabobank announced plans to take control of Robeco, a leading Dutch fund manager, as part of a strategy to build its interna-

management businesses. Robeco has four listed investment funds: Robeco and Rolinco, which invest in shares; Rorento which focuses on fixed income instruments; and Rodamco, which deals in

tional life assurance and fund

Mr Willam van't Hooft; Rabo bank corporate finance direc-tor, said the purchase of Gilde followed "an important policy change" within Rabobank. The bank had decided to

increase its management buy-out activities through an independent management com-

Gilde would also take Rabo bank into private equity investment outside the Nether-

The management team of Gilde will operate indepen-dently of Rabobank and will have a right to so-called carried interest in the funds once certain performance targets In addition to the purchase

of the management company, Rabobank is paying Fl 200m to buy the assets of Gilde's four existing funds from their inves-

Mr Leendert van Driel, part-ner at Gilde Partners, said Gilde Partners would be seeking other investors for the Since it was founded in 1982.

Gilde Partners has managed funds with a valoa of Fl 271m and has invested in over 100

Mr Hooft said Gilde could be floated in five years if it produced the necessary perfor-



# THE SOUTH AFRICAN BREWERIES LIMITED Rog. No. 68/16025/06 [trocoporated in the Republic of South Africa) ("the Company")

RESULTS OF THE CAPITALISATION SHARE AWARDS

UAL Merchant Bank Limited is authorised to announce that, further to the announcement published on Wednesday, 15 May 1996, elections from ordinary shareholders to receive a final cash dividend of 193 cents per ordinary share on account of the year ended 31 March 1996 in fieu of the capitalisation share award to ordinary shareholders were made in respect of a total of 46 316 730 ordinary shares, resulting in a final cash ordinary shareholders were made in respect or a total or 40 316 730 ordinary shares, resulting in a little total dividend payment of R89 391 288.90, and elections from holders of the series "B" automatically convertible cumulative preference shares") to receive a cumulative preferential cash dividend of 127.5 cents per B convertible preference shares on account of the year ended 31 March 1996 ("preference cash dividend") in lieu of the capitalisation share award to B convertible preference shareholders were made in respect of a total of 1 207 842 B convertible preference shares, resulting in a preference cash dividend payment of R1 539 998.55. As a result, a total combined dividend payment of R91 501.515.40 (which includes R670 227.95 in recidual cash dividends payable in lieu of fractional entitlements to new ordinary shares, arising out of the capitalisation share awards referred to below) is due by the Company.

Accordingly, pursuant to the capitalisation share awards and based on the averaged closing price of the Company's ordinary shares on The Johannesburg Stock Exchange ("the JSE") for the four business days ended Friday, 28 June 1996 of R127.3125, 4 012 949 new ordinary shares, on the basis of 1.60691 new ordinary shares for every 100 ordinary shares held, are to be issued to ordinary shareholders representing an 84.26% Issue and 274 166 new ordinary shares, on the basis of 1.06156 new ordinary shares for every 100 B convertible preference shares held, are to be issued to the holders of the B convertible preference shares representing a 95.39% issue, making a combined total issue of 4.287 115 new ordinary shares. Accordingly, the number of issued ordinary shares in the share capital of the Company has increased from 296.383 093 ordinary shares to 300 670 208 ordinary shares.

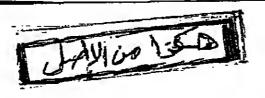
The listing of the 4 287 115 new ordinary shares in the Company will commence on the JSE and on the London Stock Exchange from the commencement of business today.

Posting of share certificates and dividend cheques

Share certificates in respect of the new ordinary shares and cheques in respect of the final cash dividend, the preference cash dividend and the residual cash dividend in respect of fractional entitlements to new ordinary shares will be posted to the applicable shareholders registered on the South African share registers by registered and ordinary mail respectively and to the applicable shareholders registered on the United Kingdom share register, by first class mell, today.

By order of the Board

2 Jan Smuts Avenue



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Credit Suisse Group, the new bolding company, will be refo-cused into four core busi-

At present, the group oper-

played a part in the restructur- observes that in an average bailed out by profits from asset merger, 30 per cent of the customers move their accounts.

Switzerland and there are over-lapping facilities in 224 loca-

tions. In all these locations, the

branches will be amalgamated

- resulting in a reduction of

Between 15 and 20 branches will be closed, so the Swiss

branch network will shrink by

40 per cent to less than 250

branches after the reorganisa-

tion is completed. However,

Neue Aargauer Bank, which is

the biggest bank in the canton of Aargau, will continue to operate as a full service

regional banking subsidiary of

By far the biggest part of the new Credit Suisse Group will

be the enlarged Credit Suisse

First Boston, which will be

headed by Mr Hans-Ulrig

Credit Suisse Volksbank.

112 branche

that consolidation is needed. and leapt at what he perceived to be an opportunity earlier this year to strike boldly at Switzerland's banking overcapacity by merging with rival

The resulting group would have controlled almost half of the domestic banking market, but the scale of the likely job cuts was frightening enough. It certainly provided useful ammunition to bolster UBS's

rejection of the approach. Yesterday, CS admitted that its basic retail banking

mated 3.500 tob cuts in Switzerland out of 5,000 worldwide. would close in locations where Credit Suisse, Volksbank and

close proximity. Another 15 to 20 will be shut in unprofitable

THE SHAKE-UP AT CREDIT SUISSE

George Graham, Banking Correspondent

# Making sure of one of the few places at the top table

The approach of the would have created one of the millennium has injected an world's largest financial almost apocalyptic spirit into the world's leading universal

Global competition

A group of 15 or 20 contenders are jostling for position, convinced that, in a matter of years, there will be room at the top table for no more than four or five dominant players which will command the lion's share of the profitable business while the second division picks up

Mr Rainer Gut, who has imprinted his mark indelibly on the Credit Suisse group over the past 20 years, has already made one attempt this year to ensure that Switzerland had a representative in this "global buige bracket" of top wholesale banks. His overture in April to

Union Bank of Switzerland

The people

groups, with a commanding position in asset management and a rare strength in investment banking on both sides of the Atlantic A CS-UBS merger would, Mr Gut still believes, have repre-sented a "quantum leap". But

after a vigorous rejection from UBS, Mr Gut looked battered. Now, he has looked inwards in search of ways of making CS into an international powerbouse. The comprehensive overhaul will organise the group by line of business,

history and geography that has determined CS's structure. Swiss analysts welcomed the new structure and the promise of SFr700m (\$560m) a year of cost savings in years to come.
"If you ever want to run this

sweeping away the mixture of

empire efficiently, you have to run it according to sectors and

Bank Julius Baer in Zurich.

The new CS organisational chart bears a marked resem-blance to the structure announced earlier this year, -Like SBC, CS has grouped

into four divisions: wholesale and investment banking, asset management, private banking, and domestic retail banking. "It's the standard McKinsey model," said Mr Kaufmann.

CS has even brought in a McKinsey man to run the new organisation: Mr Lukas Mühlemann, who ran the manage-ment consultancy's Swiss business for 17 years before he left to head Swiss Re, the giant reinsnrer, and will now become group chief executive.

The restructuring offers CS a number of immediate gains. First, it creates an opportunity to tackle head-on overcapacity in the Swiss retail banking market, with the elimination of 3.500 jobs and 112 duplicate branches in half the time. Plac-

with considerably less fanfare, by Swiss Bank Corporation. ing private banking and asset management in stand-alone divisions also creates more vis- of this stake. ibility for these low volatility profits, which command greater respect from investors.

The new structure will also allow CS to eliminate unnecessary competition between the group's various units. Mr Gut had already begun to tackle these duplications, with projects under way in areas such as equity research - the group boasted six different analysts following Nestlé shares - and settlement back offices. The process can now be carried

much further.
Finally, CS bas promised investors that the SFr1bn restructuring charge it will take this year will be covered by profits on its non-core investments, principally its 47
per cent stake in the Elektroand Deutsche Morgan Grenfell.

watt utility. London analysts have long urged CS to get rid What remains to be seen,

bowever, is whether the combination of Credit Suisse'a wholesale banking business with CS First Boston and CS Financial products - a marriage of investment and commercial banking Mr Gut had long resisted - will create a global bulge bracket bank.

Marrying CSFB's entrepreneurial culture and high pay packets with the more stolid mores of Credit Suisse may be difficult. But the new bank will now have the size to compete with the biggest and the right sort of structure to offer corporate clients a full range of financial services under one roof, following the example of

# The path of change over two decades

Credit Suisse founded.

Huge losses resulting from a scandal at its Chiasso branch in southern Switzerland shake the whole group.

Joint eurobond venture between Credit Suisse and White Weld metamorphoses into investment banking powerhouse Credit Suisse First Boston in partnership with the US's First Boston.

Mr Rainer Gut becomes chairman.

CS Holding created as umbrella parent for group, with Credit Suisse domestic and international bank as its main subsidiary, but is immediately obliged to bail out its First Boston partner after heavy credit losses.

Credit Suisse takes over Swiss Volksbank, Switzerland's fourth largest bank, and quickly falls foul of a slump in the Swiss housing market.

Swiss Re buys a 20 per cent stake in CS Financial Products, the CS group's derivatives unit, while CS seals the alliance by taking a reciprocal 9 per cent stake

Credit Suisse forms a new alliance with Winterthur Insurance. Its attempt to buy Austria's Creditanstalt is rejected. 1996, April Rival Union Bank of Switzerland rebuffs Mr Gut's suggestion of a merger that would have created one of the world's largest banking

CS launches radical overhaul of group structure.

1996, July

**George Graham** 

# How CSFB stacks up Equity-capital Long-term capital

not according to geographical location," said Mr Hans Kauf-

Ralph Atkins and Nicholas Denton

# Blue-eyed boy of the investors

Mr Lukas Mühlemann created a whiriwind within the sometimes sleepy reinsurance world with his appointment as chief executive of Swiss Re in September 1994. Mr Mühlemann, who is succeeded by Walter Kielholz, has attracted a strong stock market following that CS might well be seeking to emn-

In the same month as Mr Mühlemann's appointment, Swiss Re raised SFr5.5bn from the sale of its direct insurance companies, leaving the group to concentrate on its core business of protecting conventional insurers against big losses.

Mr Mühlemann, who joined .

from McKinsey & Co, the management consultants, set a target return on equity of 15 per cent and, from the start, increased Swiss Re's focus on shareholder interests, "Lukas Mühlemann is the blue-eyed boy who, in the eyes of American investors, can do no wrong," says Mr Angus Rundman, insurance analyst at Bar-clays de Zoete Wedd.

The structure

Aged 46, cigar-puffing Mr

Mühlemann is a model management consultant, fizzing with ideas and nervous energy but also creating some upset within the group with the pace of change he decided was nec-

essary.
Indeed, his is precisely the character Mr Rainer Gnt thought needed to push through the restructuring of

the CS group.

If the plan succeeds, Mr
Mühlemann is well placed to follow Mr Gut as chairman of CS. That, as much as the official "differing views", is the reason why Mr Josef Acker-mann, president of Credit Suisse and long seen as heir apparent to Mr Gut, resigned.

passed over in favour of Mr Mühlemann. The post goes

offered the post of chief executive of CSFB, the new inte-grated division embracing both commercial lending and invest-But colleagues said he felt

instead to Mr Hans-Ulrich

Doerig, a member of the execu-

commercial banking division, Mr Oswald Grübel, takes the powerful post of head of global trading of the new CSFB.

The appointments do not, however, represent a takeover of the investment bank by the commercial bank. Both Mr Doerig and Mr Grübel worked at CSFB in London in its heyday as the leading euromarkets house in the 1980s. Moreover, the key business heads will report primarily into Mr Allen Wheat, who bolsters his position as chief operating officer

of CSFB.

It is understood that the executive committee of CSFB will consist of five executives Mr Ackermann had been from the investment banking and derivatives side of the business - Mr Wheat, Mr Chris Goekjian, Mr Chuck Ward, Mr Richard Thornburgh and Mr Chris Roberts - and three from Credit Suisse - Mr Doerig, Mr Grübel and Mr Rudolf Hug. But the key people will be

the executives one or two lev-

els down - those who actually

bring in business. There is a

Another executive from the significant risk that the restructuring will provoke some of them to leave. Mr David Mulford, bead of Europe for CSFB, says: "People are not going to rush ont the door when they have this opportu-

> But there are two particular dangers. First, the overheated jobs market in investment banking, which has already contributed to a haemorrhag ing of staff from CSFB's US bonds division. "To go through a restructuring right now could be detrimental," says an executive. "You do risk losing your best people, which is very dangerous in investment bank-

Second, the harmonisation of investment banking and commercial banking pay structures
- which Mr Gut said would
begin next year - will be especially delicate. Credit Suisse executives balk at the bonuses paid to CSFB staff, which were last year double the investment bank's pre-tax profits. Mr Wheat alone earned an esti-



William Hall, Zurich

# Four core businesses in refocused international financial institution

Credit Suisse, the oldest and most international of the Swiss banks, has a deserved reputa-tion as one of the pioneers of modern Swiss banking. It played a decisive role in financing the industrialisation of Switzerland, including the construction of the Gotthard railway tunnel, and is the only European financial services group with a significant investment banking presence in the

However, its recent haphazard growth and acquisition of etand-alone businesses with decentralised managements has resulted in overlapping products and a lack of customer focus. The purpose of the current

restructuring is to change the group from a Swiss bank with international activities into an international financial institution with headquarters and certain core businesses in Swit-

nesses, each operating under its own brand name and legally grouped under two sep-arate Swiss banks: Credit Sui-sse (using the former Swiss Volksbank as a corporate vehicle) and a big new Swiss bank, Credit Suisse First Boston (within the legal framework of the old Credit Suisse). Functionally, the new Credit Suisse will have two autonomous divisions: Credit Suisse

Management structure Credit Sulase Credit Suisse

Volksbank (Swiss domestic banking) and worldwide pri-vate banking under its existing brand name Credit Suisse Private Banking.

The former will be run by Mr Paul Meler, currently president of Swiss Volksbank, and the latter will be headed by Mr Klaus Jenny, a member of the executive board of Credit Suisse. Bank Hofmann, Clariden Bank and the reorganised Bank Leu will continue as subsidiaries of the holding company but will be managed by the private banking business

Credit Suisse Volksbank will combine the domestic branch networks of Credit Suisse, Swiss Volksbank and Bank

antonomous divisions, Credit the corporate and investment banking business, Credit Suisse First Boston.

In essence, the existing inter-national investment banking business of CS First Boston is being merged with the existing international corporate and Swiss investment banking Credit Suisse Financial Products, a leading player in deriv-atives and risk management products, will also form part of

The top management of the new Credit Suisse Group will be strengthened by a number of new appointments to central support functions. Mr Phillip Colebatch, who

will head Credit Suisse Asset Management, will act as interim group chief financial officer until a replacement is found. A new chief risk officer will also be appointed to ensure that the group's strat-egy towards risk fits in with its corporate objectives. The new management atructure will take effect from January 1 next

The realignment of the new business units will take place over the next couple of years and by the end of 1998, the new organisation should be in place - with each business unit managing its own infrastructure, accounting system and branch

**George Graham** 

management services to its private banking clients. But the retail network will bear the brunt of the group's restructuring, with an esti-

> Mr Gnt said 112 branches Bank Leu units operate in

Compared with the slowly phased slimination of 2,000 jobs at Volksbank over the last three and a half years, thet represents a significant ratcheting up of the pace of restruct-

MGM GRAND INC.

# MGM Grand, Inc.

# 8,625,000 Shares

Common Stock

Joint Global Coordinators **Deutsche Morgan Grenfell** 

Oppenheimer & Co., Inc.

#### 1,725,000 Shares

This portion of the offering was offered outside the United States.

**Deutsche Morgan Grenfell Dean Witter International Ltd.** 

Oppenheimer International Ltd. **Montgomery Securities** 

Goldman Sachs International

**ABN AMRO Hoare Govett** 

Barclays de Zoete Wedd Limited

**Credit Lyonnais Securities** Robert Fleming & Co. Limited

Schroders

Nomura International

SBC Warburg **UBS Limited** 

#### 6,900,000 Shares

This portion of the offering was offered in the United States.

**Deutsche Morgan Grenfell** Dean Witter Reynolds Inc.

Bear, Stearns & Co. Inc. Morgan Stanley & Co.

Ladenburg, Thaimann & Co. Inc.

The Seidler Companies

incorporated

Oppenheimer & Co., Inc. Montgomery Securities

BT Securities Corporation Salomon Brothers Inc.

Raymond James & Associates, Inc.

Sutro & Co. incorporated

#### Swiss retail banking

Switzerland has lost a quarter of its banks over the past five years through acquisition and closure, but Swiss bankers are in no doubt that their market remains crowded and unprofit-

With one branch for every 938 people, Switzerland is one of the most densely banked countries in Europe. With generally low interest rate margins and a cost base that averages more than 75 per cent of net banking income, the Swiss banks clearly face a long-term profitability problem.

"Restructuring in Switzerland is as sure as next Christmas Day," said one senior. Swiss banker. Credit Suisse has already

ing of the Swiss banking industry, notably with the 1993 acquisition of Swiss Volksbank, the country's fourth largest bank, and the subsequent takeover of Neue Arganer, a

regional bank. Together, these acquisitions have made it the market leader with a market share of around 30 per cent.

However, despite the group's valiant claims that the integration of Volksbank had been successfully completed by the end of last year, it was clear that much more remained to

be done. Mr Rainer Gut, CS chairman, is under no illusions that mergers are a panacea; indeed, he operations were losing money,

But he also believes firmly

Union Bank of Switzerland.

# Quaker falls foul of fad for 'good-for-you' drinks

ast November Mr William Smithburg, chair-I man and chief executive of Qnaker Oats, appeared before the company's annual meeting and predicted that its disastrous acquisition of Snapple Beverage, the trendy soft drinks maker, would at last come good.

Wait and watch for 1996, and see what we can do," he told Quaker's long-suffering

So they waited, and they watched: but by now, they must be wishing they had oot For last week, Quaker delivered yet another in a long series of warnings that Snapple was failing to live up to expectations, and would again turn in a loss for the year.

Without doubt. Qnaker's acquisitioo of Snapple for \$1.7bn at the end of 1994 ranks as one of the worst fiascos in recent US corporate history. So what went wrong?

Hindsight is not strictly necessary to explain why Quaker's decision to buy Snapple was ill-founded. Even as Quaker announced the deal, commentators warned that it was paying far too much for a business

Snapple had shot to promi-nence in the US soft drinks market through the phenomenal success of its "new age iced tea and juice drinks with names like Mango Iced Tea and Amazin' Grape Juice. The drinks were supported by quirky advertising and a dubious claim on the bottle cap: making it number one in the

How Snapple turned sour for Quaker Oats

Share price relative to the S&P Composite

1992 93 94 95 96

"Made from the best stuff on

A decade earlier Quaker, best known for its breakfast cereals, had struck gold when it diversified into soft drinks through the acquisition of Stokely-Van Camp, US makes of Gatorade, a sports drink Thanks to growing consumer enthusiasm for healthy drinks and investment by Quaker, sales of Gatorade had soared.

Already market leader in the sports drink segment, Quaker saw the Snapple acquisition as giving it market leadership in

 Nor 2 1994 Quaker Oats announces the acquaision of Snapple Severage for \$1.7bn in cash. Moments later Snapple announces a slump in third quarter net profits from \$26.9m to \$7.1m. Quaker's share pice fells 10%. Jan 17 1965 Custor integrates the marketing of its Sneople and Gatorade acti chinks under Donald Uzzi, its new chief marketing officer. The combination "presents transactious profit properties is used.

● Jan 17 1995 Qualer reports a 20% fall in net profits to \$34.4m for the quarter to December. Mar 8 1995 Qualter's chief financial officer unexpectedly resigns, unsettling Well Street. The company says it will take a reorganisation charge of \$75m to \$90m in the quarter to June.

 Jun 20 1995 Quelor warns amilysts that Snapple is proving more difficult to absorb than expected. Seles have fallen15% below lest year's levels, it says. 30f 42 1965 Qualter says not income for the quarter to June WE fall \$40m to \$50m below expectsforts, citing a number of problems including poor Snapple sales.

Oct 23 1995 Board director Philip Marinesi, president and other operating officer, prespectedly quits.
Well Street says he is waiting the plant for the Spapole Seaso.

New 8 1995 At the company's amust positing. Quater chairman and other executive Wilson Smittburg defends.
Shapple acquaition, saying he aspects it to notch up double-digit sales growth in the coming year. Dec 21 1995 Queler warns that it will plange into the red in the querter to December because of Spapple's dismail.

Star 26 1996 Cuelog warms that second helf profile will be jet by a "seles shortlett" at Snepple and by the cost of lexinching a new ad campaign for the brand next month. Scapple will end the year "significantly before break-even, it adds.

three fastest-growing soft drink segments in the US. Further, it thought it could boost sales of both brands by combining their distribution chan-

> But the danger was that "good-for-you" drinks could just be a fad. And even if they were not, Snapple no longer had the market to itself Coca-Cola and PepsiCo, acutely aware of the danger to their market share, were already launching their own varsions of iced teas and juice drinks. In fact, on the same day that Quaker announced the Snapple

had tumbled from \$26.9m to \$7.1m in the quarter to Septem-

The business definitely had peaked," says Mr William each, an analyst at Donaldson Lufkin & Jenrette. "The category was maturing, and Coke and Pepsi were ramping up."

Soon after the acquisition had been completed, Quaker discovered another problem. Gatorade sold mainly through supermarkets and convenience stores, while Snapple sold mainly through corner stores and deliacquisition, Snappls itself announced that its net profits rate distribution systems.

Quaker wanted Gatorada'a distributors to take over the distribution of Snappla to

supermarkets and Snapple's distributors to take over the distribution of Gatorade to the delis. But Snapple'a distribu-tors, who had long-term contracts, refused to go along with the plan because it would mean swapping high-margin Snapple sales for lower-margin

Gatorade sales Eventually, Quaker was forced to back off. But analysts say that while it was trying to sort out the mess, it virtually abandoned marketing. Then at last, in April this year, it

campaign that tried to make a virtue of Snapple's position as number three in the US soft drinks market, behind Coke

"It was a disaster," says Mr Tun Pirko, managing director of Beymark, a US food and drink consultancy. "It was confusing. It said we are mediocre. It was way off any reasonable strategy for what trademark equity is about."

Now, the campaign has been canned and Quaker is poised to launch a new marketing blitz. Next week it plans to start giving away millions of bottles of Snapple on the streets, in the parks and on beaches of the US, hoping to build up demand in the remaining summer months

Quaker hopes the costly exercise will help build up Snapple's sales beyond the east and west coast markets, where 70 per cent of its sales are today. But analysts say it faces an uphill battle in trying to counter Coke and Pensi.

So will the Snapple acquisition ever come good for Quaker? "I guess it means what you mean by come good." says Mr John O'Neil, an analyst at Oppenheimer.

"Is it likely to attain the goals Quaker had when it boneht the business? No. Can they make it a profitable com-pany? Yes, but it will wind up being a smaller one, and it will probably never be able to justify what Quaker paid for it."

Richard Tomkins

# Morgan Stanley benefits from rise in market share

By Maggle Urry in New York

The continuing strength of financial markets helped Morgan Stanley, the investment bank, to nearly double earn-ings per share in its second quarter, which ran to May 31. Fully diluted earnings per share for the quarter were \$1.75, up from 91 cents in the same period of 1995. and from \$1.57 in the first

In early trading trading the shares jumped \$1% to \$50%. Book value per share was \$29.73 at the end of the second

Mr Philip Duff, chief financial officer, said "the operating environment has been about as ideal as one could imagine" although the rise in market interest rates in the second quarter had dampened some areas of activity such as debt underwriting and fixed interest

However, he also attributed the profits improvement to a rise in the firm's market share. which he said was a result of a move in 1994 to expand the husiness desoite a tough trading background.

"It looked like a gamble at the time. It is definitely paying off." he said.

Looking forward, he said that the environment for but there was still a significant pipeline of deals, although not as large as some of the multibillion dollar offerings Morgan Stanley had managed in the second quarter.

Group revenues, net of interwere \$1.53bn, up from \$1.01bn in the comparable quarter last year and from \$1.45bn in the first quarter. The investment banking division had its best ever quarter with revenues of \$5421 ing the quarter to end November 1995 when revenues were \$503m. In the second quarter last year they stood at \$278m. The rise reflected strength in mergers and acquisitions and underwriting.

But trading revenues fell from the record \$704m in the first quarter to \$565m in the second, although still ahead of the \$438m in the second quarter last year. Equity trading was ahead, the bank said, but fixed income was hit by lower trading volumes.

Asset management revenues jumped from \$88m in the comparable quarter to \$143m, largely the result of the acquisition of Miller Anderson &

# News executive chosen to run John Fairfax

By Nikki Tait in Sydney

John Fairfax, Australia's leading newspaper publisher, in which Mr Conrad Black, the Canadian media tycoon, holds the largest single stake, yesterday announced that it was appointing Mr Robert Muscat as its new chief

Mr Muscat, 48, is currently the chief operating officer at News Limited, the Australian arm of News Corporation, the media and entertainment group headed by Mr Rupert Murdoch, He replaces Mr Bob Mansfield, who quit earlier this

continuity. Fairfax said last night that

Mr Muscat would take over on August 1. He first joined News in 1968, and became production manager of the Sydney newspaper operations in his late twenties. He was subsequently promoted to become group general manager of the newspapers unit in 1987. Mr Muscat took on his current position at News last

chief executive. This effectively ranked Mr

months in the job - but then stayed on to ensure some Muscat as the third most senior executive at Newa Limited, with Mr Ken Cowley acting as chairman and chief

executive. Rumours of the Muscat appointment first circulated after a Fairfax board meeting last Wednesday. At that stage, Mr Muscat was said to be on holiday, and the potential choice was not confirmed. But it was quickly suggested that - if the rumours were

correct - choice of a senior year, when Mr Lachlan News executive to run Fairfax Murdoch, Mr Rupert could have some bearing on Murdoch's son, became deputy the relationship between Mr Black and Mr Murdoch, both of whom are shareholders in the

group, and on the unending speculation about Fairfax's

At present, Mr Black's stake in the publishing group is pegged at 25 per cent by Australia's rules on foreign ownership of media assets. Mr Murdoch's interest is smaller, below the 5 per cent disclosure

Another 17 per cent is held by Mr Kerry Packer, the Australian businessman who owns Australia's leading TV network and counts as Mr Murdoch's main domestic rival. He is also unable to raise his stake, because of cross-media ownership rules.

A new conservative federal government has promised to review media ownership constraints, and while its inquiry has yet to be set up, most observers assume that the review will eventually lead to some sorting-out of Fairfax's ownership. As a result, relations between the three businessmen and thair kay executives are closely watched Yesterday, in a statement

Mr Muscat said that leading a company such as Fairfax "with a great tradition and even greater potential" was "a career opportunity too good to miss". Fairfax shares rose five

# Aztech Systems in the red

By James Kynge in Kuala Lumpur

The share price of Aztech Systems, Singapore's second largest local electronics company, tumbled yesterday after the company announced a halfyear operating loss.

The computer accessories company said it posted an operating loss of \$\$17.5m (US\$12.4m) in the six months to June 30, mainly due to falling prices of CD-ROMs and disk drives for CD-ROMs. Aztech also wrote off S\$15m for an investment in US-based Reveal Computer Products in the first half.

Analysts said they were shocked" at the extent of Aztech's operating losses, mainly because the company had given no warning of the loss. Aztech's share price fell by 18 per cent to 0.66 Singapore cents - a key factor in the wider market's 18 point retreat

to 2,273 points. The company's problems raised concerns that other companies in Singapore's electronics sector may also post worse than expected results. The sector accounts for more than half the island's manufacturing output and manufacturing contributed 28 per cent to GDP last year.
"I think there could be some

more disappointments along the way," said Mr David Toh, investment analyst at ING Barings in Singapore.

Analysts said that although Aztech's main business - the manufacture of "sound cards" which allow computer users to communicate by fax or modem was profitable, it was hit by the declining operating margins which are affecting the wider economy.

Economists said margins were under attack from the rising cost of renting property and land, and by wages which are predicted to grow this year by about 6 to 7 per cent. while economic growth is slowing.

#### Inkel Corporation

(Incorporated in the Republic of Korea with limited liability) To the Holders of the Company's

> U.S. \$20,000,000 1/2 per cent. Convertible Bonds 2003

(the Bonds')

**Notice of Meeting** 

Notice is hereby given of a Meeting of Bondholders to be held on 25th July, 1996 at 10.00 a.m. at the offices of Chase Manhattan Trustees Limited ("the Trustee") at Woolgate House, Coleman Street, London EC2P 2HD to consider and, if thought fit, approve the following resolutions as Extraordinary Resolutions (as defined in the Trust Deed dated 20th June, 1994 between the Company and the Trustee):

(i) a committee of Bondholders be formed to discuss and negotiate with the Company and any other person any alterations to the Terms and Conditions of the Bonds or the Trust Deed dated 20th June, 1994 made between the Company and the Trustee which such committee considers appropriate in connection with the such committee considers appropriate in connection with the proposed merger of Inkel Corporation Into Haital Electronics Co., Ltd. pursuant to the Merger Agreement dated 13th May, 1996 between Inkel Corporation, Haital Electronics Co., Ltd. and Now Precision Co., Ltd. (the "Merger") and that the Trustee take such steps as it shall in its sole discretion think fit to form such committee including by the making of such regulations as the Trustee in its sole discretion considers appropriats for the nomination of members of such committee, the regulation of its proceedings and the extent of its powers: proceedings and the extent of its powers:

the Trustee be instructed not to execute any supplemental Trust the Trustee be instructed not to execute any supplemental Trust Dead either for the purposes of Condition 5(D) of the Bonds or otherwise to facilitate the Merger unless such supplemental Trust Dead has been approved by a further Extraordinary Resolution of Described Services.

Bondholders, and in the event of a meeting being convened to approve such supplemental Trust Deed, a resolution be put to such meeting to

approve the Merger.

THAT if resolution 1, above is not approved by the Bondholders and the resolution of the Company's shareholders to approve the Merger is passed, the Trustee be and is hereby directed to give notice to the Company that the Bonds are immediately due and repayable pursuant to Condition 9 of the Bonds and that the Trustee be authorised to take such other steps, including the taking of proceedings against the Company, as the Trustee considers necessary or desirable in convection with the foregoing or otherwise to ensure prompt repayment of the Bonds, all subject only to the Trustee being indemnified to its satisfaction.

Outstanding Bonds (as defined in the Trust Deed) may be deposited with (or to the order or under the control of) a Paying Agent for the purpose of obtaining voting certificates or appointing prodes until 48 hours before the time fixed for the meeting, but not thereafter.

**CONTRACTS & TENDERS** 

ANNOUNCEMENT

SUPPLY OF X-RAY MACHINES

The Ministry of Health of Albania intends to buy with its funds

5 x-ray machines; bidding process will be conducted through

The Ministry of Health of Albania is pleased to invite all eligible

A complete set of bid documents in English may be purchased by

any eligible bidder on the submission of written application to the

Bids will be opened in the presence of those bidders representatives

above and upon payment of a non refundable fee of USD 100.

For further information you can contact the following address:

Investment & Infrastructure Department

Ministry of Health, Tirana, ALBANIA

Tel: +355 42 64661 Fax: +355 42 64632

sources which can supply the above mentioned goods.

who choose to attend at 12 o'clock, August 15, 1996.

THE PRINCIPAL PAYING AGENT The Chase Menhattan Bank, N.A. Woolgate House, Coleman Street, By order of the Trustee

Open International Bidding.

PAYING AGENT Chase Manhettan Bank Luxembourg S.A. 5 rue Plaetis, L-2338 Luxembourg-Grund

3rd July, 1996

Republic of Albania

payment for the country's payphone system.

Albanian Telecom

the following address:

Phone: +355 42 34254

Fax: +355 42 32200

11, "Myslya Sayr" Street

Albanian Telecom

Tirana, Albania

NOTICE TO BONDHOLDERS **Cement Corporation** especialist in a Company List, by mingran in Potoron, R.O.C.) 85 \$65,900,990 4 per cent, Bonds Bas 2002 Adjustment of Conversion Price

NOTICE IS HEREBY

GIVEN that as a result of the distribution of stock dividends of 53,024,170 shares by Chia Hein Cement Corpor July 13, 1996, the conversion price of the Convertible Bond has, in accordance with the Trust Deed dated May 24, 1994, been adjusted from NT July 13, 1996. Dated: June 27, 1996 **BUILDING SOCIETY** £12,000,000 Subordinated Floating Rate Notes

In accordance with the lemms and conditions of the Notes, notice is hereby given that the limits of statemen for the latters Fredor 28 June 1986 to 29 Documber 1996 has been fixed at 4.855 per cent per saxum. The coupon amount per \$4,800,800 will be \$20,579.77 payable on 30 Documber 1996 against presentation of the relevant Note.

**CONTRACTS & TENDERS** 

Announcement

Albanian Telecom has established to use chipcards as means of

Card manufacturers are invited to participate on the tender which

will be organised on the July 15th, Albanian Telecom

A detailed description of technical specifications can be found in

#### **TANJONG** PUBLIC LIMITED COMPANY (Incorporated in England No. 210874) NOTICE OF SIXTY-NINTH

ANNUAL GENERAL MEETING NOTICE IS HERRRY GIVEN that the Sixty-Ninth Annual General Meeting of TANJONG PUBLIC LIMITED COMPANY will be held at 10.30 a.m. on Wednesday, 24 July 1996 at the Mahkom Balicoon III — Balicoon Floor, Hotel Istana, 73 Jahm Raja Chukm, 50200 Kusla Lampur, Malaysia for the following purposes:

(1) To receive and consider the audited accounts of the Company and of the Group for the year cuded 31 January 1996 and the Reports of the Directors and Auditors thereon.

(2) To declare a final gross dividend of 12.8 sen per share of 7.5 pence each less Malaysian Income Tax at 30% in respect of the year ended (3) To re-elect Mr Augustus Ralph Marshall, a Director who retires by rotation in accordance with Articles 76 and 77 of the Company's Articles of Association, as Director of the Company pursuant to Article 74 of the Articles of Association.

(4) To re-appoint Messas Price Waterhouse as Anditors of the Company and to authorise the Directors to fix their remuneration. (5) To transact any other business of which due notice shall have been given in accordance with the Companies Act, 1985.

BY ORDER OF THE BOARD

17th Floor Messara Boustead Jaian Raja Chulan 50200 Kasia Lumpur Malaysia A member of the Company entitled to attend and vote is entitled to appoint or more proving of his own choice to attend and your lease and him.

A prusy most not be a member of the Company. The form of princy must be deposited at the Company's Principal Office at 17th Floor, Memora Bousseld, Jalan Raja Chulen, 32200 Kasia Linapur, Malaysia, not less that 48 from before the time appointed for the meeting or adjourned meeting. Return of a completed form of princy will not preciode a member from attending and voking personally at the meeting. Copies of Directors' Service Contracts are available for inspection at the Company's registanted office during business hours from 2 July 1996 to 24 July 1996 and will be available for inspection at the piace of the Annual General Meeting Effects minutes prize to said during the meeting.

HELSAMEL SAVE LIMITED

Due 1999

#### PERSONAL Training and speech writing by

award winning speaker.

**EUROPEAN INVESTMENT BANK** ESP 20.000.000.000 Capped Floating Rate Notes

The notes will bear interest at 7,52813% per annum for the interest period 17 June 1,996 (included) to 15 September 1,996 (excluded). Interest payable on 15 September 1.996 will amount to ESP 1.903 per

Madrid, 17 June 1996 BANCO CENTRAL HISPANO Paying and Calculation Agent Sanco Central Hispanoamericano, S.A.



aquitaine uk limited £368,015,000 Guaranteed Unsecured Floating Rate Notes 2003 For the six months 28th June, 1996 to 30th December, 1996, the Nores will carry an interest rate of 5.775% per annum with an interest amount of £145.95 per £5,000 Note, pay-able on 30th December, 1996.

Company, London Ament Ben

Seokers Trust

JUPITER TYNDALL GLOBAL FUND, SICAY

DIVIDEND NOTICE The Directors resolved on 28 lune 1996 to pay a dividend of £0.02 per share to stareholders of the High Yield Portfolio on record on 28 June 1996 with an exdividend date of 29 June 1996 payable on 3 July 1996.

#### **TANJONG** PUBLIC LIMITED COMPANY

(Incorporated in England under the Companies Acts 1908-1917: No. 210874)

NOTICE OF EXTRAORDINARY GENERAL MEETING

NOTICE IS HEREBY CIVEN that an Extraordinary General Meeting of TANJONG PUBLIC LIMITED COMPANY ("the Company") will be held at 12.00 noon, on Wednesday, 24 July 1996 at the Mahkots Ballroom III – Ballroom Floor, Hotel Istana, 73 Julan Raja Chulun, 50200 Kuala Lumpur, Malaysia for the purpose of considering and, if thought fit, pussing the following Special Resolution:

SPECIAL RESOLUTION PROPOSED AMENDMENTS TO THE ARTICLES OF ASSOCIATION OF THE COMPANY

OF ASSOCIATION OF THE COMPANY

"THAT as a result of the ordinary shares of the Company which are listed on the Kuala Lumpur Stock Exchange having become prescribed securities under Section 14 of the Malaysian Securities Industry (Central Depositories) Act 1991 and in order to comply with the Listing Requirements of the Kuala Lumpur Stock Exchange and to clarify provisions on the regulation of the internal affairs of the Company, the new Articles of Association as contained in Appendix II to the Circular to Shareholders dated 2 July 1996 accompanying the Notice convening this meeting (with deletions from and additions to the cristing Articles of Association marked-up for case of reference) be and are haveby approved and adopted as the Articles of Association of the Company, in substitution for, and to the cuclusion of all the existing Articles."

BY ORDER OF THE BOARD

SIUAGAMY RAMASAMY

BY ORDER OF THE BOARD

17th Floor Menara Boustead Jalan Raja Chulan 50200 Kuala Lumpur

Date: 2 July 1996

A proxy need not be a member of the Company. The form of proxy must be deposited at the Company's Principal Office at 17th Floor, Means Boustead, Islan Raja Chuba, 50000 Kuala Lumpur, Malaysia, oot less than 48 hours before the time appointed for the meeting or adjourned meeting. Ledging of a completed form of proxy will not preclude a member from aftending and voting in person at the meeting should the number subsequently wish to do so.

Due 1.999



Registered Office: Lincembourg, 13, me Go R.C. Lincembourg 2, 34. g, 13, me Goethe rbourg 2, 34,593

PINAULT PRINTEMPS-REDOUTE

NOTICE TO HOLDERS OF SHARE PURCHASE WARRANTS EXPIRING ON AUGUST 2, 1996

(SICOVAM code 21910) Holders of Pinault-Printemps-Redoute share purchase warrants (8ans d'Acquisition d'Actions) issued in July 1993 by SAMAG (Société Alsocienne de Magasins) are hereby reminded that soid warrants will expire with effect from the close of business on August 2, 1996. The warrants will be struck off the Official List of the close of the Bourse trading session of Friday August 2, 1996. Thereafter, any outstanding warrants will be null and void.

Each warrant entitles the holder, on payment of the sum of FF 722, to one share of FF 100 naminal value.

Holders of warrants wishing to exercise their entitlement are isvited to contact their authorized intermediary no later than August 2, 1996.

KfW International Inc. Nom. ITL 150.000.000.000.-Floating Rate Notes due 1998

Notice is hereby given that from 28 June 1996 to 30 September 1996 (94 days) the notes will carry an interest rate of 8.16094% per annum. Interest payable on 30 September 1995 will amount in ITL 108,546 per ITL 5,000,000 Note and ITL 1.065,456 per ITL 50,000,000 Note. Agent Bank: Société Européenne de Banque, Société Anonyme

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Aleksander Biberaj

Vice General Manager

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RAS MEDITOR

The UK mobile telephone business is continuing to show strong growth aithough not at the strong levels seen last

Quarterly subscriber figures for the three principal network operators, published yesterday, show Vodafone extending its lead over Cellnet in the overall market and over Orange in digital ser-

Vodafone's shares gained 3p to close at 245%p, while Orange lost 5%p to close at 219'4p. Orange was floated on the main market in March this year at 205p. Vodafone made 273,000 connections

gross in the past quarter, giving net con-nections of 106,000. Total UK subscribers amounted to 2.56m, while the number of digital sub-scribers was 718,000, an increase of 27 per

**Inspirations** 

seeks £12m

in fresh

cash call

By Scheherazade Daneshkhu

cent during the quarter. Vodafone said this reflected success in attracting new subscribers and retaining customers moving from the older analogue networks to

Churn, the number of subscribers leaving the network, was about 20 per cent. Cellnet said gross subscriptions amounted to 261,000, giving a net addition of 69,000 new customers. Total subscribers are now 2.46m of which 495,000 are digital.

Churn was 28 per cent. Orange, which launched its network two years ago and offers only digital services, attracted a net 85,000 subscribers and now bad 573,000. It was adding on average 30,000 subscribers a month to the network.

Churn was 17.6 per cent.

All networks are seeing a slowing in customer recruitment as the business matures. Penetration, at under 10 per cent of the population, is low compared with

Mobile Communications, the Financial Times newsletter, notes that Orange's share of net new digital connections has fallen from 39.3 per cent in January before its flotation to 24.2 per cent last month. This is attributed to price-cutting by rivals, together with movea to copy Orange's initiatives, such as pricing calls by the second and combining call charges

and line rental in one payment.

Mercury One-2-One, the smallest operator, did not release quarterly figures yesterday, but there were estimates that it added 30,000 net subscribers.

Sir Gerald Whent, Vodafone chairman was paid £600,000 in salary and benefits last year according to the annual report compared with £561,000 in 1995. Mr Christopher Gent, managing director was paid £350,000 compared with £322,000.

# Thomas Cook strengthens

Leisure Industries

Inspirations, the package holiday group, yesterday announced its second rights issue in 18 months and tha proposed acquisition of Skiers World, a Cardiff-based tour operating company, for up to £1.75m. £38m (\$58m).

Mr Vic Fatah, chief execu-tive, said that Inspirations would raise £12.1m net of expenses through a rights issue of 12.7m 7.7 per cent convertible preference shares, on the basis of 2 preference for every 5 ordinary.

The shares, at 100p, are convertible at 150p a share in 1999 and the issue is fully underwritten by Beeson Gregory, stockbroker.

Inspirations' shares closed 4p down at 125p yesterday. The proceeds of the issue will be partly used to acquire Skiers World, which sells skiing holidays mainly to the US, and Canada aimed at the school holiday market.
Inspirations said that Skiers

World made pre-tax profits of £354,982 on turnover of £2.7m in the year to April 30. It is warranted to achieve pre-tax profits of not less than £600,000 in its current year to

April 1997. Mr Fatah said Skiers World was a high margin business with strong winter cashflow which would help reduce Inspirations' seasonal imbal-

Mr Jim Harris, chairman, said the rest of the proceeds would be used to strengthen the group's balance sheet and fund further expansion:

Its plans include increasing the number of AT Mays travel agency shops, which it oper-ates through a joint venture with Carlson Travel Group, from 313 to 400, and paying deferred consideration of £2m to British Airways for Caledo-

nian Airways.
Inspirations helped fund its
£16.6m acquisition of Caledonian from BA in December 1994 through a £7m rights

issue. News of the acquisition and rights issued accompanied the eompany's results for the

6 months to March 31. Pre-tax losses increased from £3.6m to £13.26m on a 95 per cent rise in turnover to

It blamed the higher losses partly on the inclusion of Cale-donian Airways for the first time in the traditionally lossmaking winter period and partly on greater overheads

caused by expansion. Mr Harris said Caledonian Airways carried 20 per cent more passengers in winter 1995-96, compared with the previous winter. He said that booking levels for summer 1996 were 5 per cent ahead of last year, and that prices were

firmer. Losses per share were 26.38p (8.52p), but the interim dividend was increased rose 11 per

# hand by adding Sunworld

Thomas Cook, the high street travel agent, finally amounced yesterday the acquisition of Sunworld, the tour operator privately owned by GVI, the Spanish group for an undis-Spanish group, for an undis-closed sum, believed to be

The deal, which includes the Oasis Park Hotel, a three-star hotel in Minorca, had been expected last month but was delayed by technicalities. Thomas Cook said buying

Sunworld, which has a 5 per cent share of the UK short haul package holiday market, would strengthen its position in its core UK market. Sunworld is the the UK's fifth largest tour operator after Thomson, Airtours, First Choice and Cos-. mos-Avro. The five account for about 60 per cent of overseas

By David Blackwell

Compass, the rapidly expanding international con-

tract catering group, virtually

doubled its presence in the US

education sector yesterday

with the acquisition of a pri-vate Florida caterer serving

It is paying up to \$26m for Professional Food-Service Man-

agement (PFM), which has 100 accounts in 27 states. Sales in

the year to August 31 were

The deal almost doubles

Compass'a sales to US educa-tional establishments to \$200m

a year. While this is less than

half the sales of market leader

Marriott, it does put the group

firmly in fourth place behind

in catching up with the opposi-tion," said Mr Mike Bailey,

head of Compass in the US, in

The US education market

was worth \$19hn a year and was under-contracted, Mr Bai-

ley said. He expected rapidly to

drive margins at the acquisi-tion up to 4 per cent - the level

Compass has achieved at Can-

"This deal marks a big stride

Sodewho and Aramark.

New York yesterday.

Beriotoy
Brawery
Country Brothers
Design
Energy Copiles
Hartstone

colleges and universities.

shareholder is to leave the

He said Sunworld needed a strong business partner to accelerate its growth and open up new opportunities.

"The time is now right for me to move on," he said. Thomas Cook, which is owned by Westdeutsche Landesbank, turned to Sunworld as its own label supplier last year, after dropping First Choice, the company in which it took a 21 per cent stake in

It has further reduced its stake to 11 per cent, mainly by choosing not to participate in a £44.1m rights issue last October, when First Choice announced profits of only £1.3m after a disastrous summer seeson.

Mr Ulrich Zierke, chief execntive of the Thomas Cook group, said the acquisition

teen, its US business acquired

Compass's existing business in education was mainly in

schools, while PFM's accounts

were principally with colleges

The combination of the two

would allow the group to com-

pete far more effectively in the

US education sector, said Mr

The consideration of \$24m on

completion is payable partly in

cash, partly through a \$2.5m

loan note and partly through the issue of 1.74m shares. The

shares closed unchanged yes-

The balance of \$2m is pay-

able in two years, subject to

Mr Larry Pande, the vendor

who built the business over 30

years, is joining Compass as a

The rest of the PFM manage-

ment team is being retained.

Last month, Compass com-pleted the acquisition of Eurest

France by paying FFr590m (\$114m) to buy out the interest

held by its rival Sodexho, the

leading French contract caterer that also owns Gardner

43.4 2.55

(37.6)

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Merchant of the UK.

(283.4 ) (39 ) (7.33 ) (21.5 ) (0.412 )

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33.6

just over two years ago.

and universities.

terday at 586p.

performance.

Compass to spend

\$26m on Florida

catering business

Mr Peter Long, chief executive of Sunworld, which is subject tive of Sunworld and founding to European Commission to European Commission approval, was "a natural extension of our existing associa-

> Mr Johannes Ringel, chair-man, said the deal was a demonstration of WestLB's commitment to the group's travel business. There have been per sistent rumours that WestLB might sell off the retail side.

> Mr Mark McCafferty, the managing director of worldwide travel-related businesses at Thomas Cook said the acquisition was in line with the group's strategy to have a mix of product and distribution as well as a mix of distribution channels.

"If you are in tour operating only or retail only, you are vul-Thomas Cook last year

reported pre-tax profits of £25.2m after a £20.2m write-down of its shareholding in

# acquires **Camelot** for \$100m

Cookson

Cookson Group, the industrial materials company, yesterday strengthened its presence in electronic components by acquiring Camelot Systems, the US dispenser manufac-

turer, for up to \$100m.

The UK group said the acquisition would make it the world's only integrated manufacturer of electronic materials, laminates and circuit board equipment for the semiconductor industry.

The family owners of Camelot, based in Massachusetts, will initially receive \$57m in cash, with a deferred payment of up to \$43m which would become payable if its profits double over the next three years. Last year, Camelot made profits of \$7.7m on sales

of about \$40m. Mr Richard Oster, Cookson chief executive, said the acqui-sition would "complete the jigsaw" in its electronic materials arm. Cookson's largest division, it last year had oper-ating profits of £79.8m (\$122m)

Camelot, which makes dispensers for chemicals and solder creams, has been discussing a possible deal with Cookson for nine months. Mr Oster said it had grown rapidly - gaining 20 per cent of the world market for such dispensers - but did not have the financial muscle to expand

tions for cash flow and borrowings over the next five years should enable it to spend about £500m on bolt-ons.

Cookson shares fell 3p to

#### **NEWS DIGEST**

# Pillsbury in South American purchase

Pillsbury, a US subsidiary of Grand Metropolitan, yesterday bought São Paulo-based Frescarini. Brazil's leading manufac turer of refrigerated dough and fresh pasta for an undisclosed sum "not material to GrandMet shareholder funds". Frescarini is being sold by LPC, a division of the French

multinational Danone and a manufacturer in Brazil of dairy

The Frescarini business has annual sales of \$45m (£29m). It includes refrigerated dough for Pasteis (snacks) and pizza, in addition to fresh pasta. It has tripled in size since 1993. Lucio Rizzi, president of Pillsbury International, commented: "Frescarini gives us leadership in refrigerated dough

#### Quantum buys Lloyd's stake

in a very important growth market."

Mr George Soros's Quantum Fund has bought a 4.4 per cent stake in Hiscox Select, tha Lloyd's of London investment company. The move follows a revival in investor interest at Lloyd's, which hopes to implement its recovery plan in

Earlier this year, Mr Soros acquired a 3.6 per cent stake in CLM Insurance Fund, another Lloyd's investment vehicle.

#### In Brief

(31.4 ) (1.03 ) (6.78 ) (110.8 ) (0.51 ) (1.8 ) (8.521 ) (20.06 ) (9.1 ) (0.34 ) (10.41 )

34.8† 2.25 6.37 89 5.77 0.21;†

25.381+ 24.66 11.99 1.8 17.31

Earnings about basic, Dividends shown net. Figures in brackets are for corresponding period, After exceptional charge. VAlter exceptional credit. †On increased capital. 

Net rental income. \*\*Comparatives restated and cover 11 months. III Gross revenue. \*\*Comparatives for 12 months. \$USM stock.

IMI has acquired Mosier Industries of Ohio, a maker of pneumatic actuators, for \$4.7m (£3.1m). The deal was effected

through IMI Norgreu, part of its fluid power operation.

VOSPER THORNYCROFT, the warship builder, has acquired Maritime Dynamics, the US manufacturer of ride control systems for fast ferries, for \$8.5m (£5.6m) cash. The UK group predicted the two companies, which have worked together for several years, would develop new technology and products for international ferry operators.

achievo even exceptional goals - with you Established as a

internationally.

He hinted that the group was considering similar acquisitions, adding that projec-

# Global banking made in Germany.

your scope is growing. Theore:

cally. And practically? Whenever you wish to make

more than just a small move. include the iVestLB in your plans. We appreciate global minking and, as one of Europe's leading banks, we have born the expenence and the potential to

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WestLB

This adventsement is issued in complence with the requirements of London Stock Exchange Limited ("London Stock Exchange").

#### Canadian Pacific Holdings Limited

Introduction to

**LONDON STOCK EXCHANGE** 

Sponsored by Austin Friars Securities Limited

Application has been made to London Stock Exchange for 362,745,627 issued common shares without nominal or par value in Canadian Pacific Holdings Limited ("New CPL") to be admitted to the Official List. The common shares are being issued pursuant to a reorganisation of the corporate structure of Canadian Pacific Limited ("Old CPL") by a statutory arrangement under the Canada Business Corporations Act which is expected to become effective on, or shortly after, 3 July 1996 (the "Effective Data"). The ordinary shares of Old CPL will be exchanged for common shares in New CPL on a one for one basis and the preference shares of Old CPL will be converted into common shares of New CPL in the ratio of one common share for every 4.263 preference shares.

Old CPL will be renamed Canadian Pacific Railway Company and New CPL will be renamed Canadian Pacific Limited on the Effective Date.

It is anticipated that admission of the common shares of New CPL will take place, and that dealings in such shares will commence at 2.30pm, on the Effective Date. At the same time the common shares and preference shares of Old CPL will be de-listed.

The Deputy Secretary and Registrar Canadian Pacific Limited 62-65 Tratalgar Square London WC2N 5DY

Austin Friara Securities Umited **Austin Friers House** 2-6 Austin Friars London EC2N 2HE

3 July 1996

# INTERNATIONAL MOSCOW BANK

Total lest year

0.48

CREDITANSTALT London Branch

US\$ 33,000,000 **Pre-Export Finance Facility** 

**ДО АНГАРСКАЯ НЕФТЕХИМИЧЕСКАЯ КОМПАНИЯ** Российская Федерация, Иркутская область, Ангарск

> JSC ANGARSK PETROCHEMICAL COMPANY Angarsk, Irkutsk Region, Russian Federation

> > Co-Arrangers and Underwriters:

Creditanstalt Bankverein London Branch

International Moscow Bank Moscow

Participants:

Banque Commerciale Pour L'Europe du Nord - Eurobank, Paris Bayerische Vereinsbank AG, London Branch WestMerchant

This advertisement appears as a matter of record only

# **Financial Times** Surveys Announcement

The Ghana and Romania surveys scheduled to appear on Friday 5 July will now be published on Tuesday 9 July

MARGINED CURRENCY DEALING CALL TOLL-FREE

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 Limited liability guaranteed Lowest margin deposits

Austria 0660 7480 Denmark 8001 0430 France 0590 6445 Finland 0800 49129016 Greek 00800 49129016 Indand J 800 555018 Norwelly 8001 1181 Spain 900 994914

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#### INTERNATIONAL CAPITAL MARKETS

# Strong housing figures send Treasuries lower

By Lisa Bransten in New York and Samer Iskandar in London

Another set of surprisingly strong housing figures sent US Treasury prices lower in early trading yesterday as the Federal Reserve's Open Market Committee began its two-day meeting to consider monetary

In mid-morning trading, the benchmark 30-year Treasury was & lower at 88% to yield 6.934 per cent and the two-year note was down % at 1001, yielding 6.216 per cent. By noon, the September 30-year bond future was & weaker at

Sales of new bomes in May rose to 828,000 from 770,000 in April, suggesting that rising interest rates have not slowed

activity in the housing sector. Economists had expected new home sales to have fallen to

While most on Wall Street had discounted the chances that the Fed would boost interest rates at this week's FOMC meeting, aome aconomists auggested yesterday that the strong housing data might spur the Fed to tighten sooner rather than later.

"The strength in the bousing sector should begin to make bond bulls and Fed policy makers alike rethink the consensus view that a downturn in interest-sensitive sectors such as housing will naturally slow the the year," said Mr Joseph Liro of CIBC Wood Gundy. The market paid little attention to a 0.3 per cent increase in the index of leading economic indicators for May. which was largely what economists had forecast.

#### GOVERNMENT BONDS

The weakness of US Treasuries spilled into European markets unevenly, with Italian bonds showing the best perfor-

Liffe's September BTP future settled at 116.82, unchanged. In the cash market, the 10-year benchmark BTP was also unchanged at 101.82, its yield spread over Bunds 4 basia points tighter at 288 points. Analysts agree that further convergence of Italian yields

with those of German bunds will depend on the outcome of the US Fed'a FOMC meeting.

"Provided the Fed does not tighten monetary policy, the spread [of BTP yields over bunds] could go down to around 250 basis points in the medium term", said Ms Marie Owens Thomsen, chief economist at BIP-Dresdner in Paris.

■ German bunds ware the poorest performers among European markets. Liffe's September bund future closed at 95.53, down 0.17. In the cash market, the 10-year benchmark bund was 0.22 lower at 97.98.

WW gilts alightly outperformed bunds. Liffe's September long gilt future aettled unchanged at 106E, having

totally erased earlier gains. The market was supported by the firmness of sterling in foreign exchange dealing.

■ French bonds were dragged down by falling Treasuries and bunds. Matif's September notional future closed at 121.82 down 0.06, after reaching a low

of 121.76. In the cash market, the 7% per cent OAT due 2006 lost 0.10 to close at 105.22. Its yield was 3 basis points lower than that of the equivalent hund, com-pared with 2 basis points on

The sell-off "could have been worse", said one French futures trader. "The market was supported by late buyers who felt they had missed out on last week'a rally."

Matif, the French financial futures exchange, yesterday announced a reduction in the margin requirement for its notional and Ecu bond conmonth Pibor rates, due to

lower market volatility. The daily fluctuation limits were also reduced, from 2.5 to 2.0 percentage points on the bond futures and from 0.80 to 0.60 points on the Pibor contract. These changes will take effect on July 5 (margin requirement) and July 8 (new fluctuation limits).

The list of instruments accepted as initial margin has also been extended to include French and German long-term government bonds, valued at 80 per cent of their nominal amount.

# Saab plans \$1bn facility as part of wider refinancing

Saab, the Swedish car manufacturer, is seeking to raise \$1bn through a five-year syndicated loan as part of a wider plan to put the company on a sound financial footing.

The facility, arranged by
J.P. Morgan, follows news last week that Saab's two owners. General Motors of the US and Investor, the main arm of the

#### SYNDICATED LOANS

Wallenberg empire, are to pump SKr3.48hm (\$534m) into Sash in a refinancing deal that should lead to a complete takeover by GML

The facility will replace a \$750m loan which Sasb took out in 1991 and provide the company with additional funding. J.P. Morgan declined to give details on pricing but it is believed that it could be in line with that on an outstanding £120m five-year transaction for Saab's UK financing arm, which was priced at between 40 and 42.5 basis points over London interbank offered rate. The company held a meeting

with about a dozen banks which have been invited to underwrite the loan. Under-writers will be asked to take on a hefty \$100m each. The underwriting phase is expected to be completed by the middle of the month, after which the loan will be released into general

syndication. Saab is the latest of several Swedish companies to tap the syndicated loans market in recent months, and could well have been encouraged by the willingness of banks to participate in facilities for the others. Construction company Skanska is also believed to be close to launching a \$650m facility, via Deutsche and Chase.

Several Swedish facilities have been increased due to the strong interest from the market suggesting that any credit concerns which banks may have had as a result of the country's problems in recent years have faded.

Jollar rea

DECL CROSS RATES

The \$750m seven-year refinancing for Investor was raised to \$1bn despite its fine terms. Fifteen banks, including the arranger Enskilda, have participated in the loan, which is scheduled to be signed

Other Swedish loans which have been increased include a debut deal for Vasakronan, the Swedish state-owned real estate company, which was leunched at \$200m and raised to \$300m, and a five-year trans-action for ASG, a freight-for-warding company, up from an initial DM300m to DM350m.

Other high-profile facilities have also been increased, suggesting that banks are still flush with cash. The \$500m loan for SPT Telecom of the Czech Republic, which had been put on hold because of a legal dispute, is set to be increased by ebout 50 per cent after attracting \$1bn from the market. The loan, led by Chase and Citibank, should be signed next week

The \$500m loan for Billitton, the international mining and minerals subsidiary of Sonth Africa's Gencor, was also raised, to \$650m, after being heavily over-subscribed in general syndication. Banks were keen to be in the deal, which was signed last week, because of the relatively generous terms and the prospect of future business from the com-

Among new loans, Southern Energy, which failed to take over Southern Water, is seeking to raise £500m for its own, requirements, via BZW and

Jul 2 Jul 1 Yr. ago Jul 2 Jul 1 . Yr. ago Jul 2 Jul 1 Yr. ago

# Steady flow of smaller deals in wide range of currencies

By Conner Middelmann

With this weak's horizon clouded by events in the US the ongoing meeting of the Federal Open Market Committee, Thursday's Independence Day and Friday'a jobs data -large eurobond offerings appear to have been put on hold. Nevertheless, the market saw a steady flow of smaller deals yesterday in a wide range

of currencies. The largest and most notable offering was a DM1.25bn issue of asset-backed floating-rate notes for Discover, the largest US credit card company. The bonds are backed by

credit card receivebles origi-

nated in the US - only the second such transaction in the D-Mark sector - and are rated triple A. The pricing of the deal, seven basis points over Libor at the re-offer price, was the same as on Citibank's DM1bn

offering launched some months

Given that Discover is a less well-known name and its deal was larger, this reflected strong investor demand, said lead manager Merrill Lynch. An official said the bonds were placed mainly among German and Luxembourg money market funds as well as banks, corporate treasuries and fund managers around

#### INTERNATIONAL BONDS

"Amid the ongoing uncertainty over the direction of interest rates, some funds are very interested in defensive instruments like FRNe," be

This defensive atance also benefited Westpac, the Austra-lian bank, which issued \$500m of one-year FRNs yielding Libor less 7 basis points at the re-offer price. Lead manager HSBC

banks, mainly in the UK. UK suparmarket chain J. Sainsbury launched \$200m of three-year bonds priced to offer a anbstantial yield pick-up over similarly rated corporate bonds in that maturity; at a re-offer spread of 25 basis points over Treasuries, it compared favourably with McDonalds' bonds due December 1999 which trade at 8 basis points over Treasuries, and Hewlett-Packard bonds yield-

Two Latin borrowers also tapped the dollar market: for more risk-seeking investors, the unrated City of Rio de Janeiro issued \$125m of threeyear bonds priced to yield 400 basis points over Treasuries, via Merrill Lynch, while Banco de Inversiones y Comercio Exterior, the Argentine foreign trade bank, issued \$100m of two-year, government-guaran-

ing 12 basis points more, a dealer at lead Goldman Sachs

snower	Par.	Goupon %	Price	Maturity	Feta %	Spread bp	Book-runner
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ty of Rio de Jeneiros CE	125 100	10.36 8.50	99.96 99.85R	Jul 1989 Jul 1998	0.75 0.83R	+24063496-08	Maria Lynch
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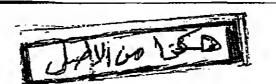
The Czech koruna eector saw the third new issue in as many months, e Kčl.5bn two-year offering for the International Financing Corporation, the

points over Treasuries, via arm. The World Bank and the European Bank for Reconstruc-tion and Development issued one-year deals in recent weeks; all three deals were led by ING Barings, which is keen to become a leading player in this

A syndicate official said that the triple A rated bonds, which offer a hefty 11 per cent yield, saw good demand from the usual European retail buyers as well as from dedicated Eastern Europe funds, Asian and offshore US investors.

offering launched some months Lead manager HSBC ago. reported sales to money mar-	two-year, government-guaran- teed bonds yielding 240 basis World Bank's private financing	become a leading player in this ern Europe fund market.
WORLD BOND PRICES		
BENCHMARK GOVERNMENT BONDS  Red Day's Week Month	M BUND FUTURES OPTIONS (UFFE) DAZSO,000 points of 100%	FT-ACTUARIES FIXED INTEREST INDICES Price Indices Tue Day's Man Acque
Coupon Deta Price change Yield aga aga  Australia 10,000 02/06 107,1260 -0,070 8,91 8,96 8,76	Price Aug Sep Oct Dec Aug Sep Oct Dec 9550 0.47 0.74 0.55 0.85 0.44 0.71 1.41 1.71	UK Gatta Jul 2 change % Jul 1 Interest 1 Up to 5 years (22) 122.06 0.10 122.54 3.0
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Zerieda * 7.000 12/06 94,9000 -0.060 7.72 7.79 7.57 Denmark 8.000 03/06 103,9400 -0.080 7.41 7.47 7.57	But, vol. solut, Cultu 7880 Puna 12944, Previous day's open Inc., Cultu 187738 Pute 183973	4 Irredeemables (5) 182,94 0,41 192,19 2,2 5 All stocks (56) 142,34 0,13 142,15 2,8
Tentos BTAN 5.750 03/01 100.5000 -0.260 5.62 6.66 6.50 OAT 7.250 04/06 105.2200 -0.100 6.51 6.57 6.43	Italy	Index-Related
emany Bund 6.250 04/06 97.9900 -0.220 6.54 6.57 6.42 eland 8.000 08/06 102.5600 +0.060 7.62 7.72 7.58	NOTICINAL ITALIAN GOVT, BOND (BTP) FUTURES (LFTE) Lina 200m 100ths of 100%	6 Up to 5 years (1) 198,48 0.22 198,04 1,8
aly 8.500 02/06 101,8200 = 8.21† 9.22 8.95 ppan No 140 6.800 06/01 118.1817 -0.250 2.29 2.34 2.32 No 182 3.000 09/05 98.2642 -0.810 3.25 3.27 8.22	Open Sett price Change High Low Est. vol Open Int. Sep 116.92 116.92 - 117.11 116.71 31345 58607	7 Over 5 years (11) 187.88 0.35 186.98 1.77 8 Al atocies (12) 187.76 0.34 187.10 1.77
No 182 3.0001 08/05 98.2642 -0.310 3.25 3.27 8.22 stherlands 6.000 01/06 98.7600 -0,160 8.46 6.49 8.33 xhugal 11.873 02/05 118.8500 +0.410 8.69 6.72 8.94	Dec - 116.07 0 485	Average great recomption yields are shown above. Coupon Bards: Lov: 0%-7
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200: US, UK in 32nds, others in declaral Source: MMS international	W NOTIONAL SPANISH BOND PLITURES (MEFF)  Open Sett price: Change High Low Est. vol. Open Int.	
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7 There musells 5.25 Five year 4.51 [ande 5.25 Six counts 5.47 10-year 6.75	M NOTIONAL UK GR.T FUTURES (LFFE)* 250,000 32nds of 190%  Open Sett price Change High Low Est. vol Open Int.	Instead Bild Offer City. Yold U.S. DOLLAR STRAKENTS Sweden 6
Ands at Intervention. • One year	Sep 108-19 108-17 - 108-28 108-15 42171 121101 Dec 105-22 105-10 +0-02 105-22 105-22 6 0	Abboy Ned Treasury 5-2 00 1500
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ND FUTURES AND OPTIONS	108 0-61 1-20 1-08 1-39 0-27 0-50 1-34 2-01 107 0-27 0-50 0-47 1-13 0-57 1-18 2-09 2-39	Bank Ned Germanam 7 93 1000 101/2 101/2 - 6.49 Austin 4/2
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95.68 95.53 -0.17 95.80 95.43 115817 205187 94.86 94.64 -0.16 94.86 94.73 1021 2880	Sep 116.90 118.90 118.79 2621 r/s Dec 117.96 117.91 117.80 220 r/s	tely 6 00 2000 94's 194's - 7.17 Sweden 4's
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	100.00	change	_	Jul 1	Indurest	ytd			Jul 2_	30	_	. ago	Jul 2	34 1	. Yr. 24	_		
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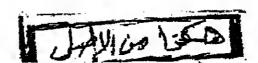
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By Philip Gawith The dollar yesterday made the long ewaited breach of the psychologically important Y110 level, although analysts cautioned that more significant The breach was hardly emphatic, and the dollar spent much of the European trading session below Y110. It closed in London at Y110.140, from Y109.515. There was no particu-

larly news development which sparked the latest leg of the dollar's advance. Against the D Mark it finished et DML 5270 from DM1.5285. Elsewhere, sterling remained a focus of market attention as it continued its onward march. It finished et DM2.3762, from DM2.3701. Against the dollar it was barely changed at \$1.5562

The worst set of current account figures seen in the past year pushed the Austra-lian dollar lower. It finished at

Jul 2

Dollar reaches highest level since January 1994 around 78.3 US cents.

in Europe the main mover was the Swedish krona which lost ground to close at SKr4.39 against the D-Mark from SKr4.363 after the repo rate was cut to 5.9 per cent from 6.1 technical hurdles still lay per cent.

There remains a fair degree of caution about the outlook for the dollar, notwithstanding its rally above Y110. Some observers believe the US Administration does not favour a stronger currency.

Against this is the attitude of the Bank of Japan which is believed still to be strongly committed to a weaker yen. Mr Michael Burke, analyst et Citibank in London, said: "Will the US continue to play ball? There is a strong feeling that

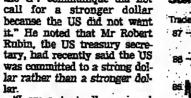
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the G-7 communique did not call for a stronger dollar because the US did not want it." He noted that Mr Robert Rubin, the US treasury secretary, had recently said the US was committed to a strong dol-

"I am not at all convinced that the Administration is

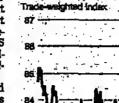
 Investors present a number of different reasons for buying sterling. These include:





going to pursue e stronger dollar policy." Mr Chris Turner, currency

strategist at BZW in London, said Y110.5 was a significant technical level, and that profitmade an early breach unlikely. He said there were also various "straws in the wind", such as the pick-up in Japanese export volumes, that suggest we should not get too bearish about the yen at these levels." He said he was "not looking for a sustained shift above Y110."



\* the very high yield it offers ten year gilts are currently

yielding over 150 hasis points more than the equivalent German bunds; \* politics: the belief that the next election will not produce a hig change in economic policy, while a decisive Labour victory, which is expected, should actually reduce ths political uncertainty that is

hanging over Sterling. The currency is also expected to bene-

CURRENCIES AND MONEY

Mr Burke said be found this reasoning "quite unconvincing", as it ignored the deterioration in the trade balance, and public finances, which engur poorly for sterling. He said a tax-cutting budget in November risked further aggravating the unbalanced state of the UK economic recovery, which is primarily consumer-driven. He predicted that "the possibility of a Labour government coinciding with e balance of payments cri-

sis is very high." Mr Burke said the current rally was "a window of sterling appreciation that would not last e year."

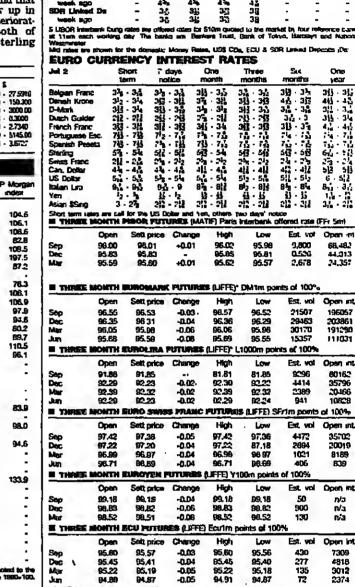
Mr Turner said the rally in the pound was the product of e succession of investors shifting from underweight or negative sterling holdings towards a more neutral position. US

investors took the lead in the wake of Mr Tony Blair's visit fit from a Labour government's to that country in April. They expected more positive attitude were later followed by Swiss and German investors. More recently, Japanese investors have been buying UK bonds and equities.

He said that DM2.40 and Y175 might well be as far as the pound would go. "We will probably see the final throes of sterling's rally over the next month or so."

He said monetary policy eppeared too loose (although sterling's rally itself represents e tightening of policy) and that this was likely to show up in higher inflation and deteriorating trade balance, both of which could drag sterling

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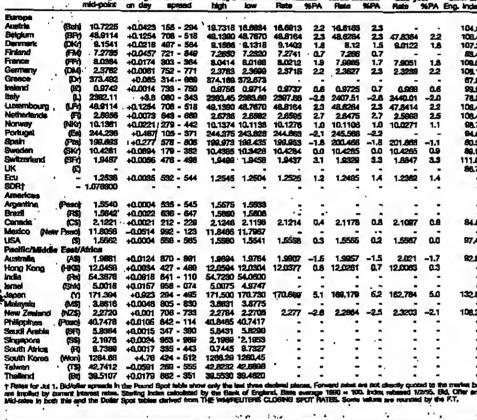
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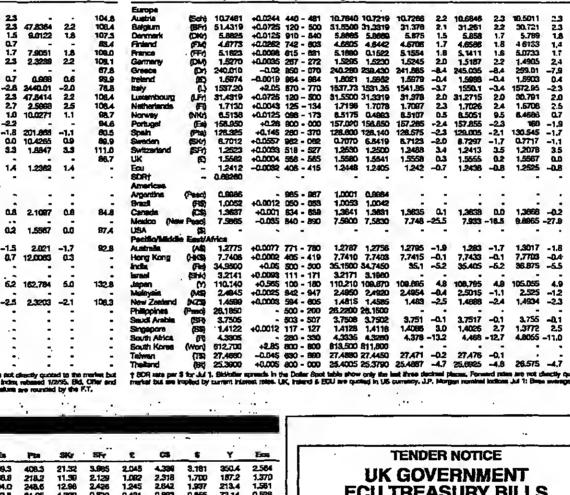
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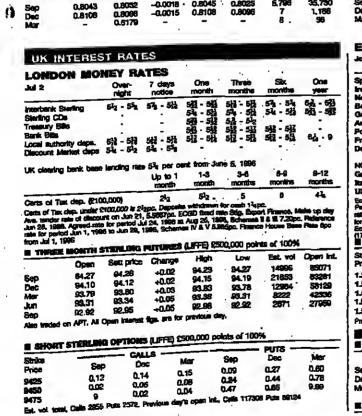
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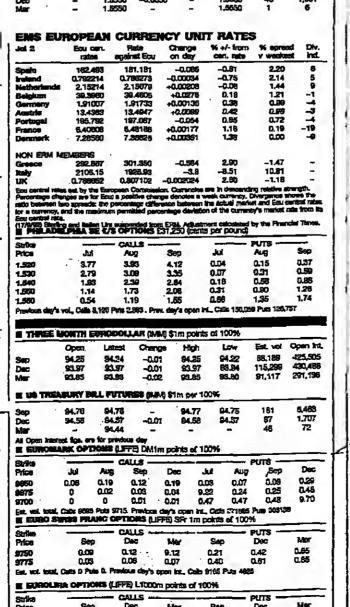




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Denmark	(DICI)	59.43	19	8775	2.895	1.064	2613	2.912	11.09	266.8	218.2	11.39	2,129		2,318	1.700	157.2	5.370
France	(FFr)	60.89	11.40 .	19	2.958	1.212	2978	3.319	12.62	304.0	248.6	12.98	2.426		2.642	1.937	213.4	1.561
		20.59	3.853	3.381	1	0.419	1007	1.122	4.288	. 102.5	84.05	4.380	0.820		0.893	0.855	72.14	0.528
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Ireland	(ME)		0.383	0.338	0.099	0.041	100	0.111	0.424	10.21	8.349	0.438	0.081		0.089	0.065	7.155	
Italy	(1)	2.045		3.018	0.891		897.2		3.803	91.80	74.91	3.812	0.731		0.798	0.584	54.29	
Natherlands			3.434 ·			0.365		2,629	19	240.8	198.9	10.29	1.822		2.083	1.535	169.0	
Norway	(NKO)	48.23	9.026	7.822	2.943	0.961	2359		4.152	100.	81.78	4.271	9.798		0.886	0.637	70.18	0.514
Portugal	(Es)	20.03	3.749	3.290	0.973	0.399	879.5					5.223	0.878		1.063	0.779	85.B3	
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Carrado	(CS)	23.05	4.814	3.786	1.120	0.469	1127	1.256	4.779	115.1	94.11	4.915	0.918	0.471	1	0.733	80.77	0.581
us	(5)	31.43	0.883	5.163	1.527	0.828	1537	1.713	6.517	156.9	128.5	6.703	1.255	0.843	1.364	1	110.2	0.808
Japan	. W	28.54	5.341	4.687	1.386	0.568	1396	1.555	5.915	1425	118.5	6.065	1.137	0.583	1.238	0.900	100.	0.732
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#### **TENDER NOTICE UK GOVERNMENT ECU TREASURY BILLS**

For tender on 9 July 1996 The Bank of England announces the issue by Har Majesty's Treasury of ECU 1,000 million nominal of UK Government ECU Treasury Bitts, for tender on a bid-yield basis on Tuesday, 9 July 1996. An additional ECU 50 million nominal of Bits will be allotted directly to the Bank of England for the account of the Exchange Equalisation Account.

2. The ECU 1,000 million of Bills to be issued by tender will be dated 11 July 1996 and will be in the following maturities: ECU 200 million for maturity on 15 August 1596\* ECU 500 million for maturity on 10 October 1996 ECU 300 million for maturity on 16 January 1997

3. All tanders must be made on the printed application 3. All tanders must be made on the printed application forms available on request from the Bank of England. Completed application forms must be lodged, by hand, at the Bank of England, Cuetomar Settlement Services, Threadneedle Street, London not later than 10.30 a.m., London time, on Tuesday, 9 July 1996. Payment for Bills allotted will be due on Thursday, 11 July 1996.

4. Each tender at each yield for each maturity must be made on a separate application form for a minimum of ECU 500,000 nominal. Tenders above this minimum must be in multiples of ECU 100,000 nominal.

 Tenders must be made on a yield basis (calculated on the basis of the actual number of days to maturity and a year of 360 days) rounded to two decimal pieces. Each application form must state the maturity date of the Bills for which application is made, the yield bid and the amount

6. Notification will be despatched on the day of the tender to applicants whose tenders have been accepted in whole or in part. For applicants who have requested credit of Bills in global form to their account with ESO, Euroclear or CEDEL, Bills will be credited in the relevant systems against payment. Bills will be credited in the relevant systems against payment. For applicants who have requested definitive Bills, Bills will be available for collection at Customer Settlement Services. Bank of England after 1.30 p.m. on Thursday, 11 July 1996 provided cleared funds have been credited to the Bank of England's ECU Treasury Bills Account No. 59005516 with Lloyds Bank Pic, Bank Relations, St George's House, PO Box 787, 6-8 Eastcheap, London ECSM 1LL Definitive Bills will be security at ECU 1000 ECU 100 will be available in amounts of ECU 10,000, ECU 50,000, ECU 100,000, ECU 500,000, ECU 1,000,000, ECU 5,000,000 and ECU 10,000,000 nominal.

Her Malesty's Treasury reserves the right to reject any or part of any tender.

8. The arrangements for the tender are set out in more detail in the Information Mamorandum on the UK Government ECU Treasury Bill programme issued by the Bank of England on behalf of Her Majesty's Treasury on 28 March 1989, and in supplements to the Information Memorandum. All tenders will be subject to the provisions of the Information Memorandum (as supplemented) and to the provisions of this notice.

9. The ECU 50 million of Bills to be abotted directly to the Bank of England for the account of the Exchange Equalisation Account will be for maturity on 16 January 1997. These Bills may be made available through sale and repurchase transactions to the market makers listed in the Information Memorandum (as supplemented) in order to facilitate settlement.

10. Copies of the Information Memorandum (and UK Government ECU Treasury Bills are Issued under the Treasury Bills Act 1877, the National Loans Act 1968 and the Treasury Bills Regulations 1968 as amended.

The asterisical maturity data is an ECU non-cleaning day. As stated in the Information Memorandum issued on 28 March 1989, in the event that any maturity date specified for any Issue of Bills is not a business day, payment will be made on the succeeding business day without any interest or other sums in respect of the delay in payment. Bank of England 2 July 1996

#### **ETBA FINANCE** FINANCIAL AND ECONOMIC SERVICES S.A.

(formerly GREEK EXPOSTS S.A.)

INVITATION

FOR EXPRESSIONS OF INTEREST IN PURCHASING THE ASSETS OF PIRATKI-PATRAIKI READY-MADE CLOTHES INDUSTRY OF VOLOS S.A."

ETBA FINANCE Financial & Economic Services S.A., established in Athens at I Eranosthenous & Vas. Constantinou Streets, in its capacity as special laquidator of the above company to accordance with Decision No. 499n/199n of the Athens Court of Appeal by which "PIRAIKI-PATRAIKI READY-MADE CLOTHES INDUSTRY OF VOLOS S.A." has been placed under special liquidation within the framework of article 46a of Law 1892/1990 as supplemented by article 14 of Law 2000/1991 and as today in

INVITES

interested parties to express their interest in purchasing the assets of the company presently under special liquidation, by submitting, within twenty (20) days from today, a written non-binding expression of interest.

SUMMARY INFORMATION ON THE COMPANY UNDER LIQUIDATION

The company under liquidation owns a cutting and sewing factory for ready made clothes. It is situated on the Palain district within the city of Votos on a plot of land

10,307.51 m² is area.

The factory building covers an area of 8,057.06 m² (ground floor) and a first floor 2,495.52m² in area. The total volume of both floors is 44,896.76 cum. The building has a concrete frame with brick walls, glass windows and metal roofs.

The company's assets include the factory's mechanical and anxiliary equipment as well as a plot of land at Dimini in the Volos region 9,475.50 m² in area.

OTHER DATA ON THE AUCTION FOR THE HIGHEST GIDDER OTHER DATA ON THE AUCTION FOR THE HIGHEST GIDDER

1. Prospective buyers, on providing a written undertaking of confidentiality, may receive the offering memorandum from the offices of the liquidating company within the time limits prescribed by law. They shall also have access to any other information they may seek and may viset the premises of the company under liquidation.

11. The offering memorandum will describe in detail the total assets of the company for sale and will contain every useful information for the prospective buyer.

111. The amounteement concerning the Public Auction for the Highest Bakler will be published within the prescribed time limits and in the same newspapers. For any further details or information please apply to:

ETBA FINANCE S.A., Eratesthemous Street, 4th Floor, Athens, Greece, Tel. (301) 726,0219 and 726,0278 - Fact (301) 726,0264

NOTICE OF FEVAL DESTRIBUTION TO HOLDRES OF US SEASCASS ORIGINAL PRINCIPAL AMOUNT OF 18-1/214 BONDS DUE 2005 ESSUED BY MLH REALTY ENVESTMENTS III (A) N.Y. INC., A WHOLLY OWNED SUBSIDIARY OF

PRINCIPAL AMOUNT OF 10-1/2% BOUNDS DUE 2005 SENSING BY MILE REALTY INVESTMENTS III (A) N.V. RNC., A WEDOLLY OWNIDD SUBSIDIARY OF MILE REALTY INVESTMENTS III N.V.

On July 12, 1996, Mill Realty Investments III (A) N.V. Inc. (the "hums"), a wholly-count substituty of Mill Realty Investments III (N.V. (70%3") through Morgan Guarany Trust Company of New York, the Juvent's paying agent (the "Paying Agent"), will make evaleble to the holders on noth date of his 10-1/2% Bounds due 2013 with an original principal statum of 10-1/2% Bounds due 2013 with an original principal statum of 10-1/2% Bounds due 2013 with an original principal statum of 10-1/2% Bounds of secretal date will be establed to receive accrued interest to Bounds. Back holder of the Bounds on such date will be establed to receive accrued interest of the Bounds. Back holder of the Bounds of much date will be establed to receive accrued interest of the Bounds. This payment of principal of SEC-41 for each 27-30 original principal amount of the Bounds. This payment by the limiter to the Boundsholders represent the final distribution on the holders of its Units in commercion with Mr. Nitter III's liquidation. A description of the sub-is proventing limited partnership interests the final dated from 24, 1996 for the final agents carded April 30, 1996. Such report may be obtained from the Paying Agent upon respect. After October, 1996, (i) the final consolidated financial statuments of NV3 and the Issuer for the final payment of the New Mr. RIEP III. 1995, and (ii) the final analysed financial statuments of NV3 and the Issuer for the payment for the principal from November 1, 1995 through June 27, 1996, will also be swallable from the Paying Agent upon respect.

No further distributions, will be made by MILERE III for the principal financial statuments of NV3 and the financial statumen

No further distributions, will be made by MLERP III, and because the Units represent the only meets owned by the leater and the only source from which the leaver is required in make payments of interest and principal tender the terms of the Bouck, the leaver will reads to further payments of interest or principal (of which \$333.59 for such \$750 original practical amount will remain suspected on the Bouck at my time and will ginteriou. After going effect in the Study distribution specified in this posice, inventors who have held share of NV3 and the Bouck of the leaver from the time that such shares and such Bouck were respectively issued will have been estimate to receive aggregate each distributions in the amount of approximately \$1,008 for each \$1.000 inventor.

In order to receive the final payment on the Bonds, each Bondholder will be required to deliver to the Paying Agent, at 60 Vectoris Busherkmers, London ECVY OFP, England, each Bond with all remaining principal and interest coupons stanched. Any questions concerning the Bonds or the final payment an constrainted lawfar should be directed to the Paying Agent at the above, address for to Mall Rankly livestances III (A) N.V. Inc., World Fascent Canter, South Tower, New York, New York 10080, Asto: Inventors Services Department, Telephone: (212) 236-4930 or (200) 633-2027.

MLH Rocky investments III (A) N.V. Inc.

Germany known as MLH Really investments III (A) N.V.)

# Academics urge radical reform of UK farm ministry | Dutch allow more

Modelling an independent UK food agency on the US Food and Drug Administration is not necessarily the answer to the problems highlighted by the heef crisis, according to four food policy specialists.

The opposition Labour party and the Consumers' Association have called for an independent body on the lines of the FDA to take over for food policy and regulation from the Ministry of Agriculture, Fish-

There has been widespread

criticism of the ministry for placing food producers' interests of above those of consumers, contributing to a crisis of confidence in food safety.

In a discussion paper pub-lished by the Centre for Food Policy at Thames Valley University, the academics say radical reform of the ministry is needed more than ever in the light of the BSE crisis. But they say the proposal for

a US-style agency fails to appreciate the differences in government between the US and the UK. The FDA is part of the executive branch of the government and is fully accountable to Congress. But independent agencies in the UK are typically quangos. which "take responsibilities off ministers' shoulders and insulate policy-making from parlia-mentary scrutiny," they say. "The responsibility for food

policy should rest fairly and squarely on the shoulders of govarnment ministers and those ministers must be fully accountable to parliament. Food safety policy needs fewer quangos not more of them." This is one issue on which the academics find common

said this week that there were very considerable advantages in having a minister responsible for the entire food chain". He added: "A free-standing agency would have no clout because there would be no ministerial accountability".

The experts, who include Mr Tim Lang, professor of food policy at Thames Valley, seek to stimulate "an informed dabate" hy setting out five options for reform: • Transferring responsibility

for food quality and consumer

ground with Mr Douglas Hogg, protection to the Department and hamper a co-ordinated UK agriculture minister. He of Health, leaving a truncated food policy;

 Moving responsibility for food promotion and agricultural industries to the Department of Trade and Industry and creating a new food ministry. Both these options would offer stronger consumer protec-

tion, they say;
• Aholishing the ministry. dividing its responsibilities among other ministries. This, apparently less favoured. option could leave the UK with no ministry to negotiate on the Common Agricultural Policy

food policy;
• Retaining the ministry but radically reforming it, with a re-ordering of priorities to put

food first; • Finally, leaving the minis-try untouched, but creating a separate food standards agency. This would have to be transparent and "not be subor-dinate to other agencies". Modernising UK food policy. Centre for Food Policy, Thames Valley University, 32-38 Uzbridge Road, London W5 2BS. Tel: 0181 231 2065. Price:

MARKET REPORT

Copper price

gains trimmed

COPPER prices lost some of

their morning gains at the Lon-don Metal Exchange yesterday afternoon as Sumitomo devel-

opments continued to domi-

News that LME broker Rud-

olf Wolff had suspended three

staff at its Tokyo operation as

it conducted its own enquiry

into the Sumitomo affair

caused the market to wobble.

Prices had been bolstered hy

an impressive 9,325-tonne stock

fall as well as some construc-

tive US economic data. The

eventual decline came in rela-

"There is always the possibil-

ity of a 'Sumitomo shock', but

after options [declarations]

tomorrow the market could go to eleep for the rest of the week, as New York will be closed on Thursday and Friday

[for Independence Day]", a

tively light volume.

trader said.

ened to \$40-\$50.

MEAT AND LIVESTOCK

I LIVE CATTLE CIME (40,0000s; cents/los)

86.575 +0.150 66,600 68.250 85.425 +0.125 85.490 85.200

III LIVE HOGS CIVE (40,000lbs; cents/lbs)

53,775 +1,000 54,275 53,700

M PORK BELLIES CME (40,000lbs; cents/lbs)

77.125 +2.000 77.125 77.125 74.300 +2.000 74.300 74.300

79.125 +2.000 79.125 79.125 81,425 +1.975 81,450 81,400 82,300 +1.100 83,200 82,300

Compiled from Reuters

nate the market.

# time for clean-up at zinc smelter

By Gordon Cramb in Amsterdam and Nikid Tait in Sydney

The Dutch authorities have agreed to give Pasminco of Australia more time before it

has to halt dumping of poisonous jarosite waste at its Budel zinc smelter in the south of the country. The decision comes as a further boost to the troubled

A\$1.1bn Century mine project in northern Quaensland, owned by the Anglo-Australian RTZ-CRA. Pasminco is to take about half Century'a output of so-called "clean concentrates". but delays in getting the mine on stream had threatened to bring it up against a deadline set under the Netherlands' environmental laws.

Earlier this year, Pasminco won an extension to the storage licence for jarosite - a calclum-containing hazardons waste - until July 1998. After mid-1998, production of jarosite at the smelter was due to cease, as Pasminco converted to the use of concentrates

sourced from Century. Development of the Century mine has been held up because of the failure of RTZ-CRA and local aboriginal groups, who have a native title claim over the mine site and surrounding area, to reach a settlement.

On Sunday, the mining group said it was satisfied that local communities were narrowly in favour of the scheme although there still appears to be considerable division

The three months price set-tled at \$1,895 a tonne, still up \$35 from Monday. The cash/ among aboriginal groups - and that it would continue with the three months premium widproject in the light of

Without such hacking, it would have mothballed the plan, aimed at creating the world'a higgest zinc mine. Other community leaders yesterday pledged to continue their fight against the project, however, and RTZ-CRA stressed that secure title to the land must be obtained by the

end of September. Yesterday, Mr David Stew-

art. Pasminco's chief executive, said his company had contacted the Dutch authorities and received support, in principle, for the jarosite extension. Pasminco will now make a formal application to extend the licence to July 1999. Century is seen as the only mine able to supply sufficient "clean con-

Budel produces some 200,000 tonnes of zinc a year, about per cent of world output. Its jarosite is at present stored in nearby ponds, but heavy metals have caused extensive ground contamination.

The Dutch environment ministry said vesterday it had agreed to a request by the North Brahant provincial government for a temporary waiver of pollution standards so it could continue to use concentrate from other mines. Mr Henk de Kruijf, an official at the provincial capital 's-Herto-genbosch said procedures had not yet been concluded but the extension was likely to be for two years - more generous than the one year the company had expected. Pasminco will not, however, be allowed to

enlarge dumping capacity.

By the end of the year the first of the four ponds will be given a polyethylene base, and ground water is being pumped up and treated. But getting rid of the jarosite would require an investment of up to FI 900m (US\$530m), which Mr De Kruiff said was "not reasonable for this operation" and not yet in

use elsewhere in the world. In arranging the extension North Brabant aimed to secure the 600 jobs at Budel.

Mr Roh Borhidge, the Queensland state premier, said yesterday that legislation to "guarantee" Century's tenure would be introduced into the state parliament next week, although he also said that this would "acknowledge native

CONTRACTOR NO.

WERKSEY

SECOMMISED:

# Lead/zinc ore puts Bac Thai on the map

The Vietnamese province is attracting increasing foreign interest, writes Jeremy Grant

stone hills, dense jungle and rustic feel Cho Don township in Vietnam's northern Bac Thai province seems an unlikely candidate for attracting foreigners with speculative dollars.

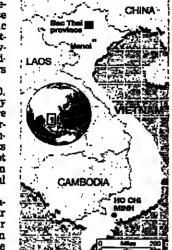
The population of 8,000. mostly ethnic minority Tay people, subsists on meagre earnings from farming and forestry. Dogs and chickens mingle on the dusty road that cuts through the town. It was not until January that Cho Don was connected to the national electricity grid.

Yet for one Australian-Canadian company, this is familiar ground. Golden Tiger Resources, a mining concern based in Perth, has spent the last two years surveying a rugged area known as Na Tum not far from Cho Don in hills 150km north of Hanoi, the capi-

The prize is access to one of Southeast Asia's largest, unex-plored zinc and lead deposits, thought to rival in size those in neighbouring Thailand.

One of the hig draws is that the area has already heen mined by foreigners. French colonialists mined and shipped zinc ore back home from a site near Na Tum at the turn of the century. A thousand years ear-lier, the Chinese dug and worked the first mines in the

COMMODITIES PRICES



area when it was under their

In the 20 years that followed the end of the Vietnam war in 1975, Vietnamese geologists mapped northern Vietnam and mineral-rich central provinces with Soviet and East European technological help. But lack of capital prevented the Hanoi government from taking things any further.

Ever since the government said in the early 1990s that it would open up mining to foreigners the data has been available to foreign companies,

About a dozen foreign mining companies - mostly Australian - have dinned into exploration. But none has been able to do much beyond preliminary surveying in the absence of a legal framework for foreign mining.

That may be changing, with the passage in March of Vietnam'a long-awaited mining law. While it stops short of guaranteeing foreigners the right to mine what they find, mining experts say it is muchneeded first step. Indeed, if Vietnam can clar-

ify aspects of the law - particularly whether foreigners must enter into joint ventures with state-owned Vietnamese companies - the next 12 months could see stalled projects

finally moving ahead. Encouraged by its preliminary findings, in March Golden Tiger started drilling on a grassy slope overlooking a green patchwork of rice paddies. Picking the site was easy: the hillside is littered with boulders, blackened by lead and zinc ore, "Just to see a little of this in Australia is enough to get you excited. These days, there are more geologists that walk np this hill than buffalo," says Mr Alan Peerless, Golden Tiger's project geologist.

When not supervising dril-

ling operations, Mr Peerless uses a Russian military jeep to inspect potential sites elsewhere. Evenings are usually spent poring over rock samples and maps under naked light bulbs in a bare office, rented from the Cho Don people's

Bnt there are ohstacles ahead. One of the problems facing any miner here is that although the hills contain significant amounts of ore, no one site has yet yielded commer-cially viable amounts. Padaeng of Thailand and a company under the Vietnamese ministry of defence are thought to be reaching the same conclusion on prospects adjacent to Golden Tiger's.

suggested to both parties that all three forge a joint venture to create a bankable project, but a deal has yet to be struck. In the meantime, the occasional sound of explosives in the surrounding hills is a reminder of the need to move fast, both with an agreement on joint activities and for

Hanol to clarify blurred areas

Golden Tiger has therefore

of its recent mining law. Local people eager to supplement their incomes are blasting tha best ore out of the ground and selling it to traders who truck it to the Chinese border for sale. The trade is so blatant that many people in Cho Don openly display piles of ore they have collected in front of their wood and thatch A 29-year-old man who gives

his name only as Dung explains how it works. "If the ore contains over 30 per cent, the trucks come and they pay us". This type of trade, known as "high grading", is a source of some concern to Golden

Until the authorities find ways of curbing illegal mining, more and more of the best ore will be lost to the black market, making the area less attractive to foreign miners.

Vietnamese newspapers have recently reported efforts to stamp out illegal mining at gold mines in other parts of northern Vietnam, where illegal mining has reached "gold rush" proportions. But here is little evidence that much is being done in Cho Don; some speculate that the local authorities have a stake in the trade. Vietnam may not yet feel

entirely comfortable about foreign involvement in mining. but bringing in foreign exper tise could be one way of ensur-ing that the Chinese are not, like a thousand years ago, the main beneficiaries of the country's northern mineral wealth The question remains whether tha incentive is there to make

Akuminkum	+875	to 907,275
Akarokakan niloy	+520	to 85,380
Copper	-9,325	to 253,300
Lead	+900	to 84,450
Michel	+150	to 32,558
Zinc	-5.625	No 589, 100
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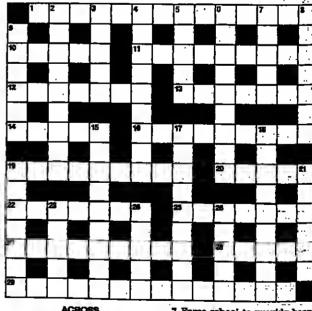
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9 Finding a way into the ball-point of the poet (6)
15 It's torture for graduates, taktive clothing (5) 11 Trade arrangement accepted by N. African umpire (9) 12 Motorists' clubs (7)

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21 Head nurse to treat broken 22 Wound again between jobs?

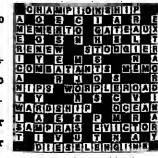
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2 Alternatively order it in compfler's dark state (9) 3 Musical heroine doing a pub

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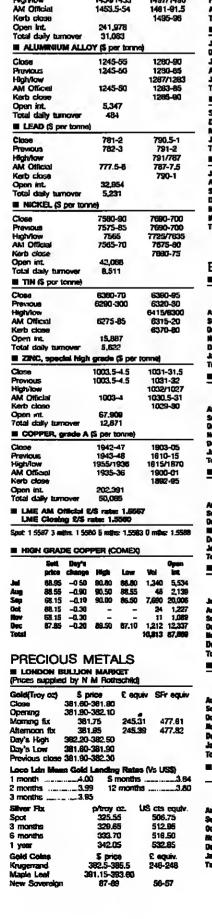
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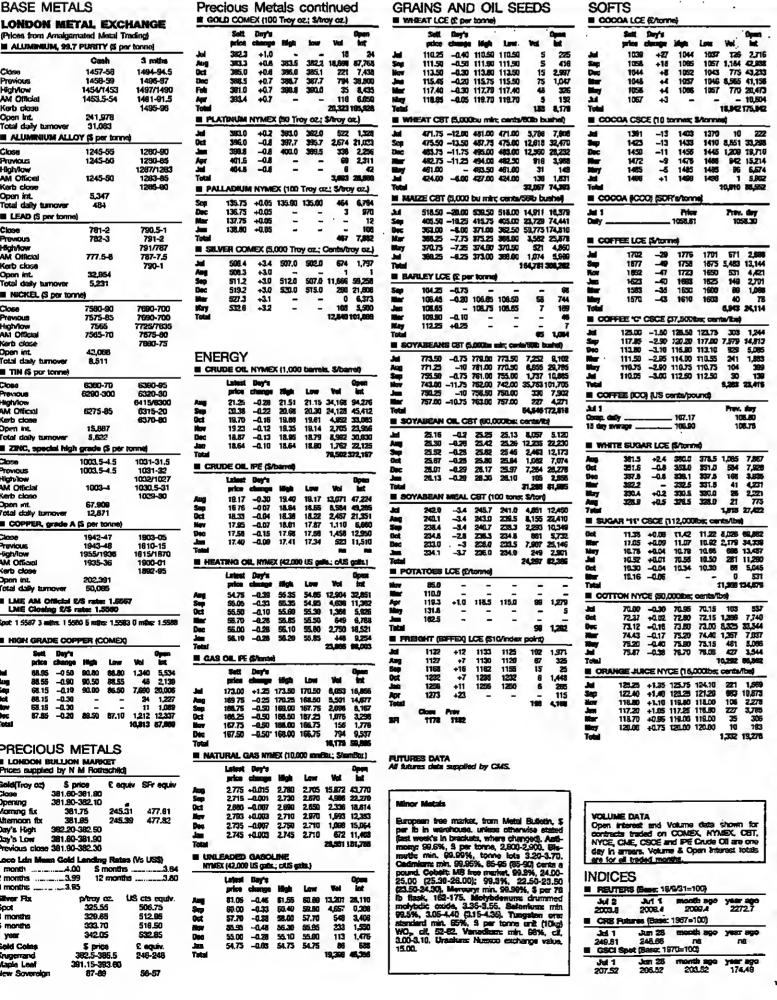
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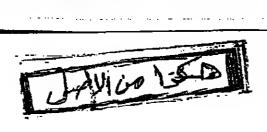
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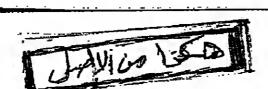
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# Equities struggle to stay ahead on the day

By Steve Thompson, UK Stock Market Editor

Some worrying US economic data on home sales promoted a bout of profit-taking on Wall Street and unnerved a UK equity market anxious for more good news after the gains recorded during the previous

Such was the worry in London about the home sales data, which hit the market just as the US Federal Reserve's Open Market Committee was meeting to discuss monetary policy, that the FT-SE 100 eventually finished with only a miniscule gain, after promising much more earlier in the session.

at 3,725.7. Second-line issues spent the session chasing the leaders, but the FT-SE Mid 250 index still managed to ontperform the leading index, finishing 5.6 firmer at 4,376.0. The Mid 250's outperformance was said by dealers to have reflected a late burst of takeover speculation in some utilities stocks. notably East Midland Electricity,

Specialists insisted that Southern Electric, which lost ont in its attempt to taka over Southern Water, was a much more likely takeover target. And there was no shortage of bid rumours in the

which raced up just before the close

on talk of an imminent bld.

water stocks, where Wessex and into pockets of selling pressure that Thames Water continued to gain ground.

There was also keen takeover speculation in other areas of the market, with Yorkshire-Tyne Tees Television sharply higher amid talk that Granada was about to pounce. The poor closing performance was

in stark contrast to the bullish feeling around the market at the outset of trading. Wall Street's 75-point jump overnight, in spite of a marked reinctance by US Treasury bonds to move ahead, gave London's marketmakers every reason to lift their opening quotations. The Footsie kicked off some 18

gradually eroded share prices. Talk around the City's dealing desks suggested that the market was not wholly convinced about the health of Mr Boris Yeltsin, who is campaigning for the presidency of Russia and whose potential defeat was seen as one of the more worrying

international factors.

good run. Carlton slipped 3 to

Zeneca continued its recent

rise in early trading but fell

later in response to a sell-off on

The early move reflected

the drug maker's prospects.

from Standard & Poor's, the US

subsidiary Zeneca Wilmington

nificant improvements over

the past three years in

Zeneca's business risk and

Previously Zeneca has been

seen as a target for Roche, of Switzerland, but Glaxo Well-

come has been considered a

plausible bidder. Naws that

Zeneca's Arimidex anti-breast

cancer drug was approved for

financial posture.

Wall Street.

511p and Granada 11 to 849p.

But it was the news on US home sales, which came in much higher than expected, that reminded London of the worries of an increase in US interest rates.

There was evidence that many more traders and fund managers were in the market yesterday and points higher but immediately ran turnover was up sharply from

recent levels. Tradepoint, the orderdriven trading system, said that it had enjoyed its second-biggest

turnover. Volume at 6pm was 871.8m shares, a figure which included Argyll's buyback of 60m shares, or 5.2 per cent of its issued capital. The total was also enhanced by the placing by SBC Warburg of 40m shares

in Jarvis Hotels. Senior dealers were split over the short term outlook for the market. One said that the prospects for big bids were shrinking with every day, as the election approached, while others maintained that the "feel-good factor" was increasingly



## Wimpey out of step

George Wimpey stood out in an otherwise bubbling bousebuilding sector, sliding more than 7 per cent after a profits downgrads from SBC Warburg. The broker, a long-term bear of the stock, was said to have cut back by £4m to £37m for this year and to bave urged clients to switch into Barratt Developments.

Shares in Wimpey surrendered 12 to 147p in above average turnover of 2.9m, while Barratt edged ahead 2 to 261p. The general run of housing

stocks stayed on the upside, underpinned by a reiterated buy recommendation for Taylor Woodrow from Charterhouse Tilney and good results from South of England builder Berkeley.

Forecasts for house price growth range up to 6 per cent per annum for the next few years, and it is clear that the outlook for the builders' gross margins is greatly improved.

Also hovering in the background are persistent whispers about another imminent 4 percentage point reduction for

Berkeley hardened 3 to 617p. Bryant Group put on 11/2 at 125p and Redrow Group moved forward 11/4 to 134p. Taylow Woodrow, seen as the one international stock in the sector, gained 5 at 165p in turnover of 1.4m shares.

Selected water stocks rose as news of a big stake sale by Southern, of the US, increased speculation about another bid in the sector

Southern sold a 25 per cent stake in South Western Electricity to raise £121.5m. It has also sold the shares in National Grid which were allotted to SWEB. And while it still retains 75 per cent of SWEB, it has a cash pile which is earmarked for investment in

the UK or Europe. One obvious target, because of the geographical overlap with SWEB, would be Wessex Water, which was up 71/2 earher in the session before clos-

ing 4½ ahead at 354p. However, Southern is quite capable of swallowing a bigger fish and Thames Water is also seen to be an eligible candidate, as is Southern Electric. Thames finished 8 stronger at 577p and Southern Electric 2

Just before the close of dealing, East Midland Electricity which published its report and accounts yesterday - jumped

Orange came off sharply, as investors shied away from the stock following its latest new subscriber numbers. These were said to compare flatly with recent figures from mobile phones rival Vodafone, The shares turned in the

day's worst Footsie performance, retreating 5% to 219%p. The figures tended to confirm the toughness of the UK marketplace, and the switching into Vodafone was said to reflect the latter's international operations where subscription growth remains rapid. Vodafone improved 3

Not all brokers were disappointed with the Orange state-

ment. "The group's subscriber growth remains on target, and its churn rate - subscriber withdrawals - is the lowest in the sector," said one leading

telecoms analyst. Securicor gained 4 to 2790 for a two-day advance of 19 following a recent "undervalued" note from ABN Amro Hoare Govett. The broker described

the stock as "cracking value". Yorkshire-Tyne Tees Television jumped 75 to 1238p. The stock has been highlighted as a potential takeover target in the light of final approval for the Broadcasting Bill Royal assent is expected at the end of the week and Granada is seen as the most likely aggressor.

Carlton is also reckoned to be running its ready reckoner over Yorkshire as well as showing some interest in HTV. Scottish Television has also been cited as easy prey. Scot-tish rose 8 to 649p but HTV was flat at 329p following a use in Germany, Austria and

EMANCIAL TIMES FORITY INDICES

	Jul 2	Jul 1	Jun 28	Jun 27	Jun 26	Yr ago	"High	Low
Ordinary Share	2737.0	2736.8	2729.7	2714.1	2720.7	2514.0	2885.2	2006.7
Ord, div. yield	4.08	4.08	4.09	4.11	4.10	4.24	4.12	3.78
P/E ratio net	16.16	16,16	16.12	16.04	16.07	15.71	17.25	15.96
P/E ratio nil	16.07	18.07	16.03	15.95	15.98	15.48	17.03	15.76
Ordinary Share index	since po	mpilation;	high 2885.	2 19/04/98	low 49.4	28/08/40.	Base Date:	1/7/35.

Open 9.00 10.00 11.06 12.00 13.00 14.00 15.00 16.00 High Low 2750.2 2750.0 2745.2 2745.0 2740.1 2741.6 2740.8 2742.2 2740.6 2750.2 2736.8 Jul 2 Jun 28 Jun 27 Jun 26 Yr ago Jul 1 29,367

26,760 28,787 1977.1 1682.0 31,742 32,756 646.1 630.9 SEAO bargains Equity aumover (2m)† Equity bargains† Shares traded (mi)† 24,518 1792,7 29,799 610,3 18,921

Jul 2 Jul 1 Jun 28 Jun 27 Jun 28 Yr ago 1High "Low 1077.30 1079.90 1079.80 1077.10 1091.40 - 1140.40 985.70

Rises and fees" 52 Week blobs and lows LIFFE Equity potions Total Highs Total Lows 37 July 2 "Data based on Equity shares listed on the London Share Service

Italy also buoyed sentiment. Zeneca lost 6 to 1434p. Glaxo closed 7 off at 8620. Oil major BP improved 8 to

578%p in the wake of broker endations. Argyll Group closed off 3 at renewed takeover speculation 346p, after the company acquired 5.25 per cent of its capital at 3460 a share. The bnyback, which was carried and growing optimism about There was further support out by BZW and Panmure Gorcredit rating agency, which raised the senior debt rating of don, hoisted turnover to 122m shares. It was said to be in line with targets set by analysts in to AA- from A+. S&P said the May when the plans were first rating upgrades reflected sig-

HSBC moved ahead 15 to 1028p after HSBC James Capel upgraded its 1996 profits forecast by 7.2 per cent and its earnings per share estimate by 10.2 per cent. Capel also moved its recommendation to buy from hold. The upgrade reflects a more positive outlook for margins and loan demand, especially in Hong Kong, the group's improving credit quality and continued control of

Abbey National pushed 5 higher to 556p after Williams da Broë and Charterhouse Tilney responded to encouraging news about the housing market by recommending the shares in the banking group.

British Airways weakened as the regulatory spotlight was given additional focus by plans for UK-US and European Union probes into big airline link-ups. Shares in BA, which recently announced an alliance with American Airlines, shed 5 to 544p. The group announces June traffic figures today.

Rumours that the £2bn Nimrod contract could be decided later this week put some life into defence stocks.

British Aerospace, hot favourite to win the Ministry of Defence contract, closed all square at 976p, with the shares sald to be "consolidating" just below the £10 mark. Rolls-Royce put on a penny at 227p and Cobham added 12 at 648p. Vickers gained 8 at 252p.

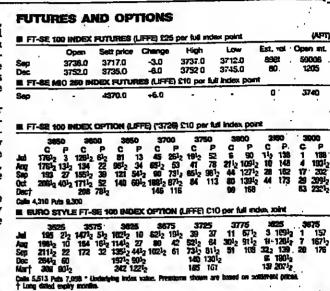
FT - SE Actuaries Share Indices

Leading brewers were firm, helped by whispers of good news to come from Bass, which organising a two-day analysts' trip. Brokers will be taken round the group's pubs and leisure operations. The

shares added 5% at 823p. Southnews, the newspaper group, gained 17 to 374p, signalling a break through a 12month range. The company has had broker support since its last set of final figures, when it revealed above average advertising growth.

Speech software group Vocalis rose to 1180 in first-day dealines. The ahares were floated at 95p.

MARKET REPORTERS: Peter John, Jeffrey Brown.



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52 - 2628.73 1722.93	1.52	1927,52	2016.68	+0.3	2022.37	Gold Mines Index(32)
						III. Regional Indions
72 36.34 3553.88 2272.74	2.72	2853.49	2676.19	+0.1	2678.56	Africa (13)
51 22.42 2927,34 2142,76	2.51	2256.79	2419.62	-1.3	2387.61	Anetralesia (7)
78 63.52 2186.39 1488.94	0.78	1673.61	1773.85	+0.7	1786.39	North America (12)
51 22.42 2927,34 2	2.51 0.78 s Index" ls :	2256.79 1673.61 old Mines ompanes.	2419.62 1773.85 96. "FT G	-1.3 +0.7 mised 181 after nu	2387.61 1786.39 Times List brackets	Times Limited, Figures in

FT-SE Mid 250	4378.0	+0.1	4370,4	4353.2	4340.5	3618.2	3,41	1.72	21.30	110.60	1764.78
FT-SE Med 250 ex lay Trusts	4415.9				4379.7		3.50	1,78	20.27	116.24	1783.96
FT-SE-A 350	1878.6			1870.9	1857.1	1658.5	3.92	2.06	15.48	46.11	1573.59
FT-SE-A 350 Higher Yield	1794.2	-0.1	1795.5	1791.6	1779.1	1663.6	5.27	1,92	12.34	54.46	1256.85
FT-SE-A 350 Lower Yield	1970.5		1968.1				2.71	2.30	20.13	38.08	1367,53
FT-SE SmellCep	2190.28		2189.54				2,93	1.76	23.67	37.42	1801.90
FT-SE SmallCap ex Inv Trusts	2190.74					1817.30	3.15	1.85	21,41	39.48	1813.87
FT-SE-A ALL-SHARE	1863.54	harres	1862.96	1856.33	1843.91	1638.36	3.85	2.04	15.93	44.61	1585.05
FT-SE Actuaries All-	Share										
		Day's				Year	Dev.	Net	P/E	Xd adi.	Total
	Jul 2	chge%	Jul 1	Jun 28	Jun 27	290	yleid%	cover	ratio	vtd	Return
10 MINERAL EXTRACTION(24)	3510.20	.00	3499.53	0400.00	0400 00	00E0 70	3.82				
12 Extractive industries(3)	4286.54		4294.49				8.74	1.63		79.25	
15 Oil, Integrated(3)	3571.88					2845.58	4.01	2.50			1261.39
18 Of Exploration & Prod(15)	2481.02		2482.01				2.12	1.72			1578.39
			-					1,61		34,94	
20 GEN INDUSTRIALS(276)	2020.78		2021.85				4.25	1.89			1109.04
21 Building & Construction(34)	1195.02		1137.56				3.46	1.67			1003.07
22 Building Matis & Mercha(29)	1874.18		1878.56				4.09	1.89		43.62	951.60
23 Chemicals(25)	2423.24		2418.51				4.12	1.96			1155.29
24 Diversified Industrials(19)	1572.44		1581.52				6.62	1.69		55.38	887.17
25 Electronic & Elect Equip(37)	2274.89		2283.63				3.26	1.69		17.87	1175.77
28 Engineering(71)	2447.90		2436.53				3.26	2.49		47.72	
27 Engineering, Vehicles(14)	3024.47		3010.68				3.47	1.98		54.61	1671,18
28 Paper, Pckg & Printing(28)	2572.16		2577.25				3.98	1.99	15.81	58.05	1077.99
28 Textiles & Apparei(19)	1364.02	-0.3	1368.62	1365.80	1358.53	1587.21	5.18	1.59	15.19	41.87	841.63
30 CONSUMER GOODS(82)	3562.30	-0.3	3573.57	3582 n2	3524.63	3210.27	3.93	1.87		61.57	1323,18
32 Alcoholic Beverages(9)	2729.89	-0.9	2754.08	2744.21	2707.20	2790.05	4.59	1.62		71.90	990.83
33 Food Producers(24)	2509.29		2508.49				4.14	1.87			1142.57
34 Household Goods(15)	2621.74		2609.65				3.79	2.14		56.43	
36 Health Care(20)	2112.22		8109,34				2.56	1.84			1006.05
37 Phermaceuticals(13)	5189.40		5183.30				3.27	1.86			1290.27
38 Tobecco(1)	4226.97		4256.62				201	2.12			1759.24
40 SERVICESIZSA	2532.32										1061.78
41 Distributors(31)	2892.03		2002.57	2522./1	2510.13	2038.38	2.82	2.01		52.31	
42 Leisure & Hotele(24)	3192.94		2008.37				2,99	1.74		50.50	
43 Madia(46)			3218.13				2.77	1.89			1725.17
	4195.87 2018.64		4204,93				2.17	1.89			1522,39
	2106.06		2016.25				3.80	2.29	14.32		1295.48
45 Retailers, General(44) 47 Broweries, Pubs & Rest.(24)	3192.17		2101.53				2.98	218			
48 Support Services(49)	2454.26		3173.43				3.21	2.12		50.78	1539.16
49 Transport(22)	2348,35		2446.38 2355.00				1.89	2.37	27.89		1565.16
							3.47	1.47	24,58	54.52	965.82
60 UTELTIES(33)	2299.06		2297.01				5.56	201	11.20	79.87	988.88
82 Electricity(11)	2554.54	+0.3	2547.06	2540,10	2538.72	2256.56	6.87	2.48			1255.81
64 Ges Distribution(2)	1214.63		1214.63				9.87	1,36	9.33		637.06
66 Telecommunications(6)	1981.76		1933.77				4.19	1.79	16.68		879.79
68 Water(12)	2154.78	+0.4	2145.55	<u>2153.63</u>	2148.85	1891.56	6.14	2.34			1209.31
60 NON-FINANCIALS(860)	1984.54		1985.20	1979.41	1968.39	1784.25	3.85	1.93		_	
70 FINANCIALS(105)	2871.96									_	1514,87
			2861.82				4.20	2.64			1246.24
71 Banks, Retail(3)	3981.48		3959.84				3.91	2.89	11.06	110,04	1911.17
72 Banks, Merchant(5) 73 Insurance(29)	3649.39 1436.37		3646.68				2.71	2.61	17.70	55.34	1162.09
	3308.56		1441.41				5.76	3.18	a 82	48.21	1089.11
74 Life Assurance(6)			3308.66				4.52	2.24	12,36	100.72	1386.97
77 Other Financial(21)	2631.54		2623.13				3.98	1.81			1510,76
79 Property(41)	1528,79	_	1522,80				4.17	1.26		35,64	949.22
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■ FT-SE Actuaries 350 Industry baskets

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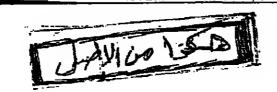
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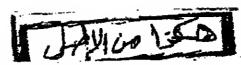
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THE TOTAL OF CHANGE	41 33 <sup>1</sup> 2 South Car576 2.50 0.8 2 26 35 <sup>1</sup> 2 35 23 <sup>2</sup> 4 20 <sup>2</sup> 5 Statement 1.44 6.5 11 52 21 <sup>1</sup> 4 21 <sup>1</sup> 5 21 <sup>1</sup> 5 11 26 <sup>2</sup> 5 18 Stroke 0.40 1.7 10 102 23 <sup>1</sup> 5 21 <sup>1</sup> 5 21 <sup>1</sup> 5 11	75 <sup>1</sup> 4 62 <sup>2</sup> 5 Transmittin 0.45 0.7 11 402 70 69 <sup>1</sup> 2 68 <sup>1</sup> 2 11 <sup>1</sup> 2 0 <sup>1</sup> 4 Transmittin 0.28 2.8 0 14 10 10 10 11 8 <sup>1</sup> 4 Transmittin 0.28 2.9 3 60 7 <sup>1</sup> 6 7 7 19 <sup>1</sup> 4 12 <sup>1</sup> 2 Transmittin 0.28 1.4 12 20 18 <sup>1</sup> 4 10 18	12 <sup>1</sup> <sub>2</sub> 9 <sup>1</sup> <sub>2</sub> Weignstade 275 417 11 <sup>1</sup> <sub>4</sub> 11 11 14 445 27 <sup>1</sup> <sub>2</sub> Weich 0.48 1.7 7 148 28 <sup>1</sup> <sub>2</sub> 25 28 <sup>1</sup> <sub>4</sub> 4 <sup>1</sup> <sub>4</sub> 5 <sup>1</sup> <sub>5</sub> 1.3 14 4 <sup>1</sup> <sub>4</sub> 5 <sup>1</sup> <sub>5</sub> 1.3 14 4 <sup>1</sup> <sub>4</sub> 5 <sup>1</sup> <sub>5</sub> 1.3 14 14 14 15 15 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Appen En 0.34 25 701 035 <sup>1</sup> 2 34 <sup>3</sup> 6 35 <sup>3</sup> 2 + <sup>1</sup> 6 Frams Sth 9 29 22 21 APP Bo 45 858 10 <sup>1</sup> 2 10 <sup>1</sup> 4 10 <sup>1</sup> 8 Embyle 17 2345 13 <sup>1</sup> 6 12 <sup>5</sup> Apple Mat 824110 31 <sup>1</sup> 4 30 <sup>5</sup> 8 30 <sup>7</sup> 8 - <sup>1</sup> 6 Excellent 124 454 22 <sup>1</sup> 2 21 <sup>1</sup> 6	211 Ja   Mariana 0/4 14 160 20 2/4 2/4 3/4
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buy	35 <sup>4</sup> 4 22 <sup>1</sup> 2 55 <sup>4</sup> 4 0.04 0.2 26 4269 28 <sup>1</sup> 2 27 <sup>2</sup> 5 28 <sup>1</sup> 5 15 <sup>2</sup> 5 Southinges 0.82 5.1 26 100 10 <sup>1</sup> 5 19 16 <sup>1</sup> 5	1 14-2 70-2 Marc 0 385 12 114 12 +4 1	2074 2021 Weeker 5.20 2.2 11 002 24214 24114 24114 2412 2212 1674 Weeker 6. 0.52 1.3 20 511 1914 10 1074 14 39 2214 Weeker 6. 0.52 1.3 27 102 28 2774 2775 14 6512 4974 Weeker 6. 0.52 0.1 10 351 1514 1476 15 14 6512 4974 Weeker 5. 31 1672 0714 6. 0. 0014 14 14 15 14 15 14 16 14 14 15 14 16 15 14 16 16 16 16 16 16 16 16 16 16 16 16 16	Arbor Dr 0.20 19 425 1944 1945 1944 +4 Ezcorpter 5 13 64 64 64 64 64 64 64 64 64 64 64 64 64	612 Ja  McGezin R 1256 12 131 12212 2114 2114 14 Secret O  McGezin R 1256 21 4308 2214 2114 14 Secret O  Modex Inc 0 16107 50 1314 1276 1276 Ja Signal
. John W. C.	97g 57g Spein Franci 0.48 4.7 30 197g 93g 97g 43g 37g Speinfein Cp 4 242 43g 43g 43g 14 93g Speins 0 0.04 0.4 5 7 183g 103g 103g	58° 45° 45° 45° 45° 45° 45° 46° 47° 46° 45° 47° 46° 45° 45° 45° 45° 45° 45° 45° 45° 45° 45	29 184g WOOgtol 13 2787 25 254g 254g -1g 184c 114c WesterStern x 0.20 1.3 32 39 164c 164c 164c -1a	Amenr Al 0.64 45 127 15 <sup>3</sup> 6 14 <sup>3</sup> 6 15 <sup>3</sup> 6 + <sup>1</sup> 4 Ament In 0.44 14 1187 13 <sup>1</sup> 6 14 <sup>1</sup> 2 15 <sup>3</sup> 6 + <sup>1</sup> 6 Fell Grp 18 13 7 8 <sup>3</sup> 6	Melamine 0.24 15 352 812 8 838 438 Silicot/8 814 -34 Memor Cp x 0 10 28 487 2518 2514 2514 115 Silicot/8
	50 <sup>1</sup> 2 38 <sup>2</sup> 3 Spring 1.32 2.7 12 236 49 <sup>3</sup> 4 49 43 <sup>3</sup> 5 11 <sub>4</sub> 45 <sup>3</sup> 2 34 <sup>3</sup> 4 Sprint 1.00 2.4 14 5796 42 <sup>3</sup> 2 41 <sup>5</sup> 3 47 <sup>3</sup> 7 5 <sup>3</sup> 4 Sprint 1.00 2.4 14 5796 42 <sup>3</sup> 2 41 <sup>5</sup> 3 47 <sup>3</sup> 7 5 <sup>3</sup> 4 14 <sup>3</sup> 4 73 <sup>3</sup> 5 367 626 414 <sup>3</sup> 4 13 <sup>3</sup> 2 18 <sup>3</sup> 5 43 <sup>3</sup> 6 43 <sup>3</sup> 6 43 <sup>3</sup> 6 414 <sup>3</sup> 4 13 <sup>3</sup> 2 18 <sup>3</sup> 5 43 <sup>3</sup> 6	5% 3% Tulinx Crp 0.20 4.0 21 378 3 47 <sub>6</sub> 3 47 <sup>1</sup> 6 38 <sup>1</sup> 6 Tulinx Crp 0.20 4.0 21 378 3 47 <sub>6</sub> 3 47 <sup>1</sup> 6 48 41 41 <sub>2</sub> 1 41 41 41 41 41 41 41 41 41 41 41 41 4	347g 28 Wein Res 2.06 8.7 11 1051 283, 303, 305, +1, 31 165 Wein Res 0.20 1.1 3829443 167g 164 167g +1, 44 27g Weinr Coal 0.32 0.5 0 40 342 343 34 247g 274g Weinpec 1.10 5.3 11 7 227g 227g 227g 227g +1, 41	AspectTei 42 790 52 40 <sup>1</sup> 4 52 +2 <sup>7</sup> 8 Festenel 0.02 58 572 44 <sup>1</sup> 4 43 <sup>1</sup> 2 4 AST Ranch 0.4732 7 <sup>1</sup> 8 6 <sup>7</sup> 8 6 <sup>7</sup> 8 - <sup>1</sup> 4 PMP htt 30 860 27 <sup>1</sup> 4 27 <sup>1</sup> 8 1	44% -1 Mercant 8 x 0.92 11 2356 26% 25% 36 12 Smithin 27% -1 Mercant 2 1322 134 2124 12% -1 Smithin
	43 <sup>1</sup> 2 58 <sup>2</sup> 6 58 <sup>2</sup> 606nc 0.76 2.0 10 1970 39 <sup>1</sup> 2 38 <sup>2</sup> 6 38 <sup>2</sup> 6 1 <sub>6</sub> 1 <sub>6</sub> 16 <sup>1</sup> 6 12 <sup>2</sup> 5 50 Motor 0.32 1.8 14 42 17 <sup>2</sup> 6 17 <sup>2</sup> 6 17 <sup>2</sup> 6 14 7 <sup>1</sup> 6 58 50 000 18 0.12 1.7 7 225 71 71 11 11 11 11 11 11 11 11 11 11 11	26% 15% Twith Cent 0.84 4.0 11 202 18½ 15% 18½ 1½ 1½ 1½ 2½ 21½ 10m Diac 0.70 3.0 10 8 23½ 23½ 23½ 43½ 41½ 32% 1005 12 3880 40% 33% 41½ 12 3880 40% 33% 41½ 14	33 <sup>2</sup> g 25 <sup>3</sup> g Watter 9.88 22 11 1124 01 <sup>3</sup> g 30 <sup>7</sup> g 30 <sup>7</sup> g 48 <sup>3</sup> g 40 Watter 1.80 3.8 11 5928 43 <sup>3</sup> g 42 <sup>3</sup> g 42 <sup>3</sup> g -3g 17 <sup>3</sup> g -3g 17 <sup>3</sup> g 18 <sup>3</sup> g	Ati SEAlv 0.38 18 2217 27 <sup>1</sup> 4 26 <sup>1</sup> 8 29 <sup>5</sup> 4 -1 Feby Off 1 269 1 §\$ Atmel 2127138 30 <sup>7</sup> 8 29 <sup>1</sup> 8 30 <sup>3</sup> 8 -18 Figgia A 0.24 65 523 15 <sup>1</sup> 4 15	13 Mertsel 0 7054 8/2 211 3/1 3/1 Southest 15 Messa Abr 14 387 12 11/2 11/2 1/2 Speepel
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新し、「企業などの問題」がある。 の場所では2000では新せることが、 が1000では、100では第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	24 24 Senter 0.72 24 44 476 30 293g 293g 242 15 667g Starting x 136 2.7 14 228 693g 695g 47g		37 <sup>3</sup> 4 30 <sup>3</sup> 6 Wheer Inc 1.84 4.4 14 444 137 <sup>3</sup> 4 37 37 -34 53 <sup>3</sup> 6 42 <sup>3</sup> 2 Whites 1.36 2.5 22 2053 49 <sup>3</sup> 6 40 49 <sup>3</sup> 6 +14	Amountaile 0.92 8 32 18 <sup>1</sup> g 17 <sup>7</sup> g 18 <sup>3</sup> g → <sup>1</sup> q Fm Tenn x 1,08 12 2211 31 <sup>1</sup> g 30 <sup>7</sup> g Fminnerit 1,08 21 167 81 30 <sup>1</sup> g : Finery 25 4852 33 <sup>1</sup> q 31 <sup>1</sup> g	31 +14 Microsope 334 358 137g 1314 1315 12 Stryler 3012 12 Microsope 14 5066 1216 11 1116 12 Stryler
Marie Ville A	5 30 <sup>5</sup> StartgBory 0.32 22 11 23 11 10 <sup>5</sup> 10 <sup>5</sup> 10 <sup>5</sup> 1.7 <sup>5</sup> StartgCham 0.05 0.7 8 33 11 <sup>5</sup>	52 50 USFSE 4.1 4.10 8.2 11 503 504 504	38 81 WhoDs. 0.06 2.7 21 308 36 35 35 35 4 4 10 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B - Rowint 18 362 85g 81g Reflection 31 26 121g 11:	85g +14 Micropratis 30 1979 151g 14 1414 -12 Shr Micro 1112 +12 Micropratis 38240131225g127141215g -13 Steel Te
<b>u</b> .	11 484 Stotegoury 0 796 774 7612 783 12 7 84 84 816 160 0.12 1.6 00 8 75 75 75 75 977 32 Stotegoury 0.00 1.8 29 45 24 334 234 12	10 15 181 181 181 181 181 181 181 181 181	14 11 West O 0.12 0.9 48 81 155g 131g 131g +12 375g 291g West Corp 1.12 3.2 10 2511 341g 341g 341g 41g 5114 2314 WARC ADR 0.71 2.5 30 18 2814 281g 281g 281g -29	Beter J 0.06 2 1259 776 7 778 -12 Beter J 0.06 2 1259 776 7 778 -12 Foodle 0.11 2 12322 106 5 32 Debutter J 0.06 2 1259 106 107 107 107 107 107 107 107 107 107 107	8.2 +1.2 Mildon-Grain 0.50 26 123 13 12 12 <sup>1</sup> 4 -14 Storick 3 <sup>1</sup> 4 -3 <sub>8</sub> Millor H 0.52 36 1246 30 <sup>3</sup> 4 29 <sup>7</sup> 4 30 <sup>1</sup> 8 -5 Strandar
	44's 22 Settch 16 3380 393, 383, 383, 393, -1,	261 165     100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	361 <sub>6</sub> 275 <sub>6</sub> WM6XT 0.86 2.0 22 4977 32 <sup>1</sup> <sub>2</sub> 32 32 32 <sup>1</sup> <sub>4</sub> -1 <sub>4</sub> 36 <sup>1</sup> <sub>4</sub> 22 <sup>1</sup> <sub>4</sub> Whether 0.18 0.5 22 101 31 <sup>1</sup> <sub>4</sub> 21 <sup>1</sup> <sub>4</sub> 31 <sup>1</sup> <sub>4</sub> -1 <sub>4</sub> 22 <sup>1</sup> <sub>4</sub> 81 <sup>1</sup> <sub>4</sub> Wood Wide 0.80 2.7 28 4850 22 <sup>1</sup> <sub>5</sub> 22 <sup>1</sup> <sub>4</sub> 22 <sup>1</sup> <sub>2</sub> 22 <sup>1</sup> <sub>2</sub> 22 <sup>1</sup> <sub>4</sub> 21 <sup>1</sup> <sub>4</sub> 11 <sup>1</sup> <sub>4</sub> Wood Wide 0.10 0.5 22 21 <sup>2</sup> <sub>5</sub> 21 <sup>1</sup> <sub>4</sub> 21 <sup>2</sup> <sub>5</sub> 11 <sup>1</sup> <sub>5</sub> 21 <sup>2</sup> <sub>5</sub> 11 <sup>2</sup> <sub>5</sub> 21 <sup>2</sup> 5 21	Benders Co 0.55 10 40 17 2 17 4 17 4 17 4 February 1,16 11 452 23 4 25 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 <sup>1</sup> 4 + 2 Memorisch 0.10 17 3139 11 18 <sup>1</sup> 8 19 <sup>7</sup> 8 + 2 Structio 36 - 3 Mobile Fel 8 5049 14 <sup>1</sup> 8 13 <sup>5</sup> 8 13 <sup>3</sup> 4 - 4 Stryker
The second secon	10% 8-2 Shidelette 0.20 2.5 30 2207 8 75g 77g -1, 54 27% Starm Right 1.50 3.3 22 497 49 484, 49 45g -1, 40% 34 Sammatter, 1.28 3.8 17 2238 387g 384, 385g 4-3		22 <sup>1</sup> 6 17 <sup>1</sup> 8 World Wide 0.10 0.5 22 21 <sup>7</sup> 8 21 <sup>1</sup> 8 21 <sup>7</sup> 8 + <sup>1</sup> 9 19 <sup>1</sup> 8 6 <sup>1</sup> 8 Worldcorp 1 820 6 <sup>1</sup> 8 66 <sup>1</sup> 8 6 <sup>1</sup> 7 1 <sup>1</sup> 9 31 <sup>1</sup> 2 31 <sup></sup>	Benium to 1.00 11 4 35 35 35 + 14 Fullon Fia x 0.68 13 226 19 2 18 34 18 and Feb 15 294 27 34 28 12 27 34 + 1 14	191 <sub>2</sub> +3 <sub>8</sub> Modern Co 0.24 16 17 10 <sup>3</sup> 2 18 16 3 3 Sulfivers Modern Mr 0.26 13 113 27 26 26 <sup>3</sup> 4 Sumitors MolesuA x 0.26 21 2156 30 <sup>3</sup> 4 29 <sup>3</sup> 8 30 <sup>5</sup> 8 3 Sulfivers
	7 4, 59% 441g Serieser - 0.60 1.0 17 1571 1599 575g 59 +13g 115g 331g Student 0.60 1.5 19 2774 381g 375g 377g +3g	22 <sup>1</sup> g 18 <sup>1</sup> 4 Union Corp 27 50 29 <sup>2</sup> g 20 <sup>1</sup> g 20 <sup>1</sup> 4 56 48 <sup>1</sup> 2 Uni 3.50 7.1 210 49 <sup>1</sup> g 49 <sup>1</sup> g 49 <sup>1</sup> g 68 51 <sup>1</sup> 4 Uni 4.50 4.50 7.1 2 63 <sup>1</sup> 2 53 63 <sup>1</sup> 2 +1 <sup>1</sup> 2	44% 27% Wyk Labor 0.32 1.0 10 1318 33% 32% 33 30 18 Wyons let 0.40 1.4 16 248 28% 27% 27% 38	Bennet F 0.00 15 169 27 253, 253, -7,     Bay View 0.60492 178 34½ 34 34½ +½   -G     Baytanta 2.40 15 875712,2113½111½ +½   G   App 23 60 27, 27, 27,	Molecum x 0.06 23 2358 33 <sup>1</sup> 4 31 <sup>2</sup> 4 32 - <sup>2</sup> 6 Sun Spu Moscom 0.04196 2161 15 <sup>3</sup> 4 15 <sup>1</sup> 4 15 <sup>1</sup> 3 + <sup>2</sup> 14 SunMic
	181 <sub>2</sub> 32 Suntst 0.80 2.1 14 788 87 9 37 1 <sub>8</sub> 37 1 <sub>9</sub> -1 <sub>8</sub> 131 <sub>9</sub> 14 58 Super Food 0.40 40 11 189 10 <sup>1</sup> 9 87 <sub>2</sub> 10 10 11 11 11 11 11 11 11 11 11 11 11	44 <sup>1</sup> g 36 <sup>1</sup> g Unifier 2.50 8.2 13 1876 80 <sup>5</sup> g 40 <sup>5</sup> g 40 <sup>5</sup> g 40 <sup>5</sup> g 41 <sup>5</sup> g 4 <sup>1</sup> g 173 <sup>5</sup> g 64 <sup>1</sup> g Unifier 1.72 24 10 4148 102 <sup>3</sup> g 77 <sup>1</sup> g 72 <sup>1</sup> g - <sup>1</sup> g 32 26 <sup>3</sup> g UniforFinal 1.08 3.8 10 488 30 <sup>1</sup> g 29 <sup>3</sup> g 29 <sup>3</sup> g 29 <sup>3</sup> g 12 <sup>3</sup>	- X - Y - Z - 54% 38% Xerox 1.18 22 41 4079 54% 53% 53% -%	BE Aero 5 3620 15 <sup>1</sup> 2 13 <sup>7</sup> 2 15 <sup>1</sup> 4 +1 GAK Serv 0.07 26 690 30 28 <sup>1</sup> 4 1 Beauticon x 0.42 17 3 9 0 6 Gantes 7 226 5 <sup>1</sup> 2 5 <sup>1</sup> 2	29 <sup>5</sup> 8 +1 <sup>3</sup> 8 MTS Sye 0.32 14 393 21 <sup>1</sup> 8 20 <sup>1</sup> 2 21 +14 Swift Tr 5 <sup>1</sup> 4 -3 Mycogen 6 146 15 <sup>1</sup> 2 15 15 +1 <sub>8</sub> Sybese
14 17 14	53 30°4 Supred 1.00 6.2 12 413 31°5 31°2 31°5 4°4 12°4 20°4 50°4 50°4 10.08 1.8 48 21°2 21°3 31°2 4°4 48 31°5 59wbot Tea	8 5 <sup>1</sup> 2 Unisys 3356 7 <sup>1</sup> 2 7 7 - <sup>3</sup> 6 7 <sup>1</sup> 2 4 Unit Curp 33 2143 8 <sup>7</sup> 6 8 <sup>5</sup> 6 6 <sup>3</sup> 6 - <sup>1</sup> 2	47 3 39 4 20m Carp 9.72 1.6 18 74 45 4 49 4 45 4 45 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 5 6 6 6 6	Benikherry 19 249 17 <sup>2</sup> 4 17 17 -1 <sub>2</sub> Sheny2000 14 4616 34 33 <sup>2</sup> 8 18 8 18 19 19 19 19 19 19 19 19 19 19 19 19 19	33% -24 Systems
	not the following and the transfer and the teat	1556 14 UkiDominiy 0.96 8.8 28 270 14 <sup>1</sup> 2 14 <sup>3</sup> 2 14 <sup>3</sup> 2 14 <sup>3</sup> 2 24 24 <sup>5</sup> 2 20 <sup>3</sup> 2 UkiDomini 0.20 0.8 13 806 24 23 <sup>3</sup> 2 24 +1 69 47 <sup>5</sup> 2 UkiBiBiDaris 0.03 0.1 2310050 50 <sup>5</sup> 4 48 <sup>3</sup> 4 49 <sup>7</sup> 2 -1	37g 3 Zupani 0.14 3.9 8 195 33g 35g 35g 25g 25g 25g 27g 212 Zenthal 1.00 3.8 39 314 275g 272 272 272 778 82 Zunk hax 0.72 10.3 8 314 275g 272 272 778 82 Zunk hax 0.72 10.3 8 7 65g 7	By Bo 020154 349 912 6 914 16 Sensing 18 2674 514 45	7 <sup>1</sup> 2 NAC Re x 0.24 6 2 33 <sup>3</sup> 4 33 <sup>3</sup> 4 33 <sup>3</sup> 4 14 System 4 <sup>7</sup> 8 <sup>3</sup> 9 Mach First 0.72 19 66 18 <sup>1</sup> 3 19 16 <sup>1</sup> 4 + 1 System 1
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United 6 100 1251 661 661 661 261 15 15 18 18 18 18 14 1414 +19 14 33 +34 14 4134 -72 14, 4814 -14 0 9 -14 14 7012 -112 44 4414 -12 12 3112 -12 13 0 - **V** -| Valmont x | 940 | 18 | 13 uCl4<sup>1</sup>4 | 33<sup>1</sup>2 | 34<sup>1</sup>4 | + <sup>1</sup>8 | Vingrid Cell | 0no 5588 | 22<sup>1</sup>8 | 21<sup>1</sup>8 | 21<sup>1</sup>4 | 21<sup>1</sup>8 | - <sup>1</sup>8 | Vicer | 6 3218 | 10 17<sup>5</sup>8 | 18 | - <sup>1</sup>8 | Vicer | 33 3172 | 23<sup>1</sup>4 | 22<sup>1</sup>4 | 22<sup>5</sup>8 | - <sup>1</sup>18 | Vicer | 33 3172 | 23<sup>1</sup>4 | 22<sup>1</sup>4 | 22<sup>5</sup>8 | - <sup>1</sup>18 | Vicer | 14 | 167 | 12<sup>1</sup>4 | 12 | 12<sup>1</sup>2 | + <sup>1</sup>4 | Vicer | 69 1182 | 13<sup>1</sup>4 | 13<sup>1</sup>4 | - <sup>1</sup>4 | Vicer | 8 365 | 14<sup>1</sup>4 | 13<sup>1</sup>8 | 13<sup>1</sup>8 | - <sup>1</sup>8 | Vicer | 8 365 | 14<sup>1</sup>4 | 13<sup>1</sup>8 | 13<sup>1</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>2</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>9 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | 22<sup>5</sup>8 | 22<sup>5</sup>8 | - <sup>1</sup>8 | Vicer | 8 368 | Vicer | H<sub>4</sub> 10<sup>1</sup>4 - <sup>1</sup>2 H<sub>2</sub> 20<sup>1</sup>2 - 1 35 35 4 204 -1 4 1½ +1 19 19 +1 Petrolite x 1.12 95 95 32 22 31 31 44
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# tech warnings, rate concerns

weaker at 5,715.94, the Stan-

dard & Poor's 500 had shed 2.00

to 673.88 and the American

Stock Exchange composite was

off 0.16 at 580.07. Volume on

the New York Stock Exchange

or 3 per cent at \$50% after

reporting record second quar-

ter earnings, due mostly to investment banking activity.

ing & Manufacturing slid \$2%, or 3 per cent, to \$69% after Pru-

dential Securities cut its rating

on the company, and Proc-ter & Gamhle lost \$1% at \$88%.

Advancing issues among the

Dow 30 stocks included Boeing, which added \$1% at \$91%, and

Toronto outperformed Wall

Street at midsession as the

market sought to catch up

with New York's gains on Mon-

day, when Canadian markets

The TSE-300 composite index

Analysts noted that equities were belped by a growing con-viction that the US Federal

Reserve was unlikely to raise

interest rates at the two-day

FOMC meeting which began

high-technology stocks.

cents to C\$10.05.

tial offer price of C\$13.

were closed for a holiday.

just 27.1m shares.

vesterday.

Exxon, up \$% at \$88%.

Canada

On the Dow, Minnesota Min-

Morgan Stanley added \$1%

came to 222m shares.

#### Wall Street

Technology shares gave up ground at midsession, followng a spate of profit warnings from some of the sector's leading companies. writes Lisa Bransten in New York.

In early afternoon trading, the Nasdaq composite, which has about a 40 per cent tech-nology shares content, was 4.17 off at 1,193.28 and the Pacific Stock Exchange technology index lost 0.7 per cent. The most prominent profits

warning came from Digital Equipment, which said that it expected fourth-quarter earnings to be below analysts' estimates, and revenues to be lower than those of the comparable period. Digital also announced that the bead of its computer systems division would resign. Shares in the ompany slid \$5, or 11 per cent,

Borland International, which makes computer software, said that it expected to make a loss of 53 to 56 cents a share in the first quarter and announced the resignation of its chief executive. Shares in that company were down \$114, or 14 per

cent. to \$8. Other software companies to issue warnings included Wonderware, off \$3% or 20 per cent at \$154, Sybase which fell \$11/2 or 8 per cent to \$18½, and Segus Software, which shed \$12% or 48 per cent to \$11%.

Interest rate concerns held sway over other areas of the market as the Federal Reserve's Open Market Committee began a two-day meeting to consider monetary policy. New data which showed that rising interest rates had not slowed activity in the hous-ing sector caused speculation that the Fed might raise rates at some time during the summer. This sent the bond market lower in early trading. At 1 pm. the Dow Jones

# **Buenos Aires weaker**

Buenos Aires edged lower at midsession on disappointment over June tax revenue figures and controversy surrounding Mr Domingo Cavallo, the economy minister. Analysts noted treasury secretary, had conceded that the government was falling short of revenue goals set by the IMF.

They said another drag on the market was imposed by reports of differences between Carlos Menem after an unexpected rise in unemployment, a defeat in Buenos Aires mayoral elections, and comments by the economy minister on corruption. The Merval index shed

MEXICO CITY turned back after a firmer start to trade and was weaker by midsession, with investors expecting higher interest rates at the anction of primary Cetes later in the day. The IPC index was Mr Cavallo and President down 2.24 points at 3,175.41.

#### S Africa regains confidence

fidently higher as gold shares defied a sinmhering metal price and industrials were spurred by overnight gains on Wall Street.

The overall index rose 46.5 to 6,891.4, industrials added 52.0 at 8,190.5 and golds picked up 50.1 to 1,771.6. Analysts said that the undertone was firm and that all indices could rise further in coming days, particularly the golds sector, expecting upbeat second-quarter results from the gold mining sector.

Among the most active gold

Johanneshurg moved cou- counters, Kloof Gold Mining appreciated R3.50 to R44.50, while Free State Consolidated Gold Mines collected R2 to close at R42.75.

De Beers, the diamond giant, was actively traded and finisbed 50 cents higher at R147.50 after a steady tug-of-war between buyers and

American Gold Anglo surged R18.50, or 4.9 per cent, to R396, while Rustenburg Platinum Holdings, parent Rustenburg Platinum Mines, edged np 50 cents to R68.

# Shares fall on CS Holding soars 12% on major restructuring

CS Holding put in a powerful performance in ZURICH after the bank announced a major restructuring, including a new name, a new CEO and the divestment of its non-core business. CS Holding jumped SFr14.50, or 12.1 per cent, to SFr134.50, while Elektrowatt, in which CS said it wanted to sell its 44.9 per cent stake, gained SFr24 to SFr483. The planned sale of indus-

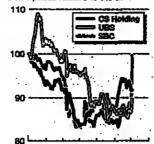
trial activities by CS also gave a boost to UBS as investors had long expected the bank to take a similar step. UBS bearer shares put on SFr40 to SFr1,270 while SBC, the third of the hig three Swiss banks, picked up SFr1.75 to SFr245.75.

Shares of Motor Columbus, in which UBS has a stake, climbed SFr35 to SFr2,495 on the view that it was a potential partner for Elektrowatt.

Taking the opposite tack, Swiss Re, whose current CEO, Mr Lukas Mnehlemann, will become the new Credit Suisse Group's chief executive officer. lost SFr5 at SFr1,265, after a low of SFr1,250, in response to his planned departure.
Activity in the banking sec-

tor took the hroad market to an all-time high as the SMI index rose 22.6 to 3,750.8. However, Mr Ian McEwen at Lehman Brothers said that the market appeared to be taking a

Share prices relative to the SMI



'flier" by pushing the CS Holding share price up so sharply, since the restructuring plan did not appear particularly rad-ical. He thought that the Swiss banking sector was beginning to look overvalued, but did not rule out the possibility that the shares had potential for a fur-

ther rise.
FRANKFURT's record peak was all too fragile. The Dax index came back from a morn-ing high of 2,586.53 to an Ibisindicated 2.565.32, down 8.12, as sentiment soured on Wall Street. Turnover was DM7.4bn. The shock of the day, however, came outside the Dax 30. Jungheinrich said that it did not expect an improvement in

operating earnings this year, and that its net profits would be hit by restructuring costs. Mr Stefan Mülheim, at Dillon Read, said that he had cut his earnings for the forklift maker from DM14.50, to a DM9.50 to

DM10 range for the current year, and from DM18, to DM14 for 1997. The shares, ex dividend, fell a net DM35, or 13.3 per cent, to DM228. There was a rippls in the Dax 30 as Linde fell DM10 to DM973. However, said Mr Mül-

beim, the forklift market

leader was well diversified,

whereas Junheinrich had been less successful on that score.

PARIS worried that the surge in US home sales could prompt the FOMC to raise US interest rates. The CAC-40 index moved from strength to weakness, finishing 6.95 lower at 2,111.80 in turnover of

FFr4.48bn. Dassault Aviation had second thoughts. Up 8.6 per cent on Monday ahead of the confirmation of the merger plan with Aerospatiale, the shares turned tail and fell FFr64, or 7.4 per cent. to FFr804. However, Cap Gemini, selling its 36 per cent stake in Cisi, rose another FFr6.50 to FFr214 in 367,000 shares dealt for a two-day gain of 7 per cent

Meanwhile, the drop in

FT-SE Actuaries Share Indices THE EUROPEAN SERIES 10.30 11.00 12.00 13.00 14.00 TS.00 Close FT-SE Eurotrack 100 1709.22 1709.50 1709.20 1707.92 1707.94 1707.96 1707.56 1707.56 1708.94 FT-SE Sprotrack 200 1749.10 1741.08 1739.03 1738.46 1738.09 1738.23 1739.86 1738.55 Jan 27 Jun 26 Jun 25 Jun 28 Jul 1 1699.10 1723.45

analysts considering the potential effects of a price war in the market. Renault dipped FFr1.40 to FFr131.50 and Peugeot, with a recently stronger market share performance, by FFr21, or 3.1 per cent, to FFr661.

Takeover speculation in the reinsurance market lifted Scor by another FFr9.80 to FFr215.80; UAP, which has 40 per cent of Scor, put on FFr2 at FFr103.80 in 444,000 shares. MILAN gave up an early advance to close flat as domestic bonds eased and investors held back ahead of June infla-

tion figures on Friday. The Comit index picked up 0.43 to 657.10, while the realtime Mibtel index turned back from a high of 10,520 to end a

point down at 10,453. Montedison lost L9 to L851.7 on further worries over capital write-downs, but Eni climbed L103 to L7,900.

Olivetti picked up L10.5 to L832.1 after Omnitel, in which

While the All Mining index was virtually flat, the All Ordi-naries closed 11.2 up at 2,256.3

on support after Monday's

sell-off, and National Australia

Bank, lifted by the Dow, put on 13 cents at A\$11.98.

miners WMC, MIM and CRA

all ended weaker after showing

promising signs of resilience in

In contrast, the base metal

in turnover of A\$619.6m. BHP rose 21 cents to A\$17.51

Olivetti is the major shareholder, said that it had 300,000 GSM mobile telephone subscribers at the end of June. Tim, whose GSM subscribers at end-June climbed to 772,795, rose L36 to L3,493.

AMSTERDAM'S AEX index finished 0.58 lower at 559.45, after 563.24. The brewer Heineken dropped F17.20 to F1372 after reports of a mildly bearish note from a big US broker. BRUSSELS featured a new all-time closing high in Delhaize, the retailer. Which closed BFr50, or 3.1 per cent, higher at BFr1,665 as the Bel-20

index rose 7.44 to 1,765.06. The retailer's gain followed an overnight rise in its US unit Food Lion of \$10 to \$8%. Food Lion accounts for around three-quarters of Delhaize's

group sales. ATHENS gave back all of Monday's 1.4 per cent advance on a combination of losses hy hank shares and some industriconstruction sector. The general index dropped

13.24 to 909.50, but some analysts described the fall as unjustified. They noted that economic fundamentals were sound and sald that any changes in economic policy introduced by Mr Costas Simitis, the prime minister, who consolidated his grip on the party machine at the weakend. were likely to be for the better.

WARSAW was weak, as investors awaited the results of today's Russian election. The Wig index fell 165.1 to 13.616.2 and analysts said that the reac-tion of foreign investors to the poll result would be crucial to the market's direction in com-

ing days.
MOSCOW, by its own recest standards, picked up only slightly as presidential aides sought to allay concerns about Mr Boris Yeltsin's illness, offi-cially said to be a cold. However, the RTS-21 index closed 10.73, or 5.4 per cent, aheadat 209.36.

The Russian market will be closed today, a holiday for the presidential election run-off poll. Brokers yesterday were-divided over the post-election prospect.

Written and edited by William

#### was 21.73 higher by noon at 5,065.80, but in weak volume of **ASIA PACIFIC**

# Rate worries, finance house rumours depress Nikkei

#### Tokyo

The mood, however, was Rumours that a non-hank soured in part hy the host of finance company might go earnings warnings from US under, and mounting uncertainty over a possible shift in Alcan Aluminum shrugged monetary policy, combined to off a rating downgrade hy Smith Barney, the US hroker, to trade flat at C\$41.55. depress sentiment, writes Emiko Terazono in Tokyo. The Nikkei 225 average fell

Among heavily traded 107.52 to 22,347.97, after moving stocks, TVX Gold picked up 5 between 22,269.90 and 22,485.23. Investors remained wary Milkyway Networks shares, over the course of US and Japwhich made their dehnt on the anese interest rates ahead of a exchange, traded as high as press conference by Mr Yasuo C\$14.25 before pulling back to Matsushita, governor of the C\$13.20, compared with an ini-Bank of Japan, and the US FOMC meeting. The BoJ had changed its accommodative stance on the short-term money markets to neutral. following last week's decline in

long-term yields. Volume totalled 295m shares as most investors stayed on the sidelines. Investors were also unnerved by speculation that Dai-Ichi Kangyo Bank (DKB) was about to suspend its finan-Finance, a non-hank money

The Topix index of all first section stocks declined 8.78 to 1,699.43 and the Nikkei 300 by 1.93 to 315.09. Losers led gainers hy 661 to 362, with 200 issues unchanged. In London the ISE/Nikkei 50

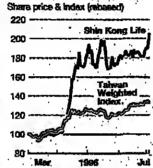
index rose 2.89 to 1,515.32. Large-capital steels and shiphuilders lost ground. Nippon Steel shed Y3 to Y369, Kawasaki Steel Y10 to Y391 and Mitsui Engineering and Shipbuilding Y4 to Y331. Carmakers fell again, with Toyota Motor down

Y40 at Y2,640 and Honda Motor off Y20 to Y2,820. Nichiei, the real estate developer and parent of Nichiet Finance, plunged Y71 to Y441, although an official at the latter, down Y80 at Y175, said the rumours were groundless.

Financials were lower, with DKB down Y20 to Y2,000 and Fuji Bank losing Y30 to Y2.340. Brokers lost ground on profittaking, Nomura Securities shedding Y10 to Y2,130 and

#### Shin Kong Life

Source: FT Extel



Nikko Securities Y30 to Y1,200. Keisel Electric Railway, the most active issue of the day. gained Y20 to Y1,270 on buying by individual investors. The company is a leading shareholder of Oriental Land, which runs Tokyo Disneyland and is reported to be considering listing on the Tokyo stock exchange. Mitsui Fndosan, tal Land, put on Y30 at Y1,520.

Some speculative stocks weakened on profit-taking. Kanematsu, the trading company, dropped Y21 to Y754. In Osaka, the OSE average dipped 104.10 to 23,625.31 in volume of 25.5m shares.

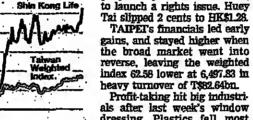
#### Roundup

A solid afternoon rally lifted HONG KONG as expectations grew that US interest rates would not be increased at this week's FOMC meeting. The Hang Seng index rose 81.82 to 11,084.43, with turnovar mproving to HK\$3.9hn.

One analyst suggested over-seas money had helped to bolster stocks. HSBC led the rally, climbing HK\$2 to HK\$120. **Bullish sentiment on Cheung** 

Kong's infrastructure spin-off which was priced at the high end of its projected range and was 25 times subscribed. helped the property developer rise HK\$1 to HK\$56.75. Asean Resources tumbled 40

#### HK\$2.05 on news that Asean warrant holders had rejected a proposal hy its parent com-pany, Huey Tai International,



dressing. Plastics fell most with a slide of 4.8 per cent. Financials, which had lagged hehind, resisted the pressure and rose by 0.6 per cent, with Shin Kong Life up by the daily 7 per cent limit, T\$8 bigher

the first hour of trade. WMC lost 11 cents at A\$9.

KUALA LUMPUR saw renewed vigour in some transport stocks as news that Konsortium Perkapalan was buying the US company Pacific Basin raised expectations of faster mergers and rationalisation within the local shipping and haulage sectors.

Konsortium stock was
suspanded, but Integrated Logistics rose 25 cents to M\$6.75, Diperdana by 70 cents to M\$22.70, Global Carriers by 45 cents to M\$8.70 and MISC by

20 cents to M\$7.80. Interest rate concerns left the composite index just 2.77 er at 1,139.82.

SEOUL edged ahead but volume remained slim as today's listing of 11 stocks on the hourse raised worries about oversupply. The composite index ended 4.14 up at 837.93. Samsung Electronics rose

Won900 to Won72,900 on talk that semiconductor companies' earnings would not be as bad as had first been expected. SINGAPORE's Straits Times

Amcol, under investigation: by the government's white collar crime unit, dipped to an intra-day low for the year of S\$2,98, before edging back to the previous closing low of \$\$2.99, just as the market

heavy volume of 5.7m shares to forced selling by investors who traded on the margin. Aztech dropped 11 cents to 56 cents after reporting an unex-

closed. Analysts attributed

BANGKOK had expected the central bank governor Vijit. Supinit's resignation; and while it welcomed the move. saving it would be good for the battered Bank of Thailand, there were no celebrations in the equity market. The SET index slipped 7.91 to 1,239.17.

3.

# **CROATIAN RADIO-TELEVISION**

#### **Public Enterprise** Zagreb, Dezmanova 10

Based upon Art.5 of the decree on the procedure of purchase of goods and services and concession of works (Narodne Novine" No. 25/96 and 32/96) public enterprise Hrvatska Radio-Televizija, 10000 Zagreb, Prisavlje 3 announces.

Public competition-Bid invitation for the collection of offers in order to choose the most satisfactory bidder for the purchase on credit of the following

1.1 Transportable containered transmitter station, which consists of:

FM-VHF II Transmitter output power 5 kw

3 units VHF II Combiner 3x5 kW 1 unit

 TV VHF III Transmitter Output Power 5kW 1 unit - TV UHF Transmitter Output Power 10 kW 2 units - UHF Channel Combiner 2 x 10 kW 1 unit

- Microwave Radio Link set for Transmission 1 TV and 4 Sound Channels including antenna systems 3 sets

Everything previously installed in transportable containers with the possibility of quick installation on the chosen location and attachment to the existing power supply and transmitting antenna systems.

1.2 Single TV and FM Transmitters:

- TV VHF III Transmitter Output Power 5kW

- TV UHF Transmitter Output Power 10kW 2 units - TV UHF Transmitter Output Power 20kW 2 units - TV UHF Transmitter Output Power 40kW 1 unit - FM VHF II Transmitter Output Power 10kW

3 units - FM VHF II Transmitter Output Power 2 kW

1.3 Parity of delivery is CIP with designation of the installation location, that is, warehouse in

Foreign and domestic bidders may participate 7. In this public competition.

The tender offer has to be composed according to the tender documentation and is required to contain the credit terms as follows: at least, credit in the amount of the total price of the contract. For the period of 5 years with the grace period of one year and with the acceptable annual interest rate.

Tender documentation can be obtained, on a working day, in Hrvatska Radio-Televizija, 10000 Zagreb, Prisavlje 3, Commercial Dept. Import Export, Room 13 or 16, Telephone No. 6163490 or phone and fax No.6163095, against the presentation of payment slip/paid money order/for the costs of documentation -DEM 840,- to the account of Hrvatska Radio-Televizija in Zagrebacke Banka, Zagreb Account No. 30101-620-16-25000-3226247.

4.1. For all technical and other information bidders may contact Mr. Pero Kulusic, Telephone No. +385 1 6115 621, Telefax No. +385 1 6163199.

5. The deadline for submitting of the offers is 9th September 1996, until 12 e.m. to the address from Art. 4.

5.1. The offers have to be in English or Croatian

5.2. The opening of the offers will take place at the address from Art. 4. in the presence of the bidder proxies who wish to be present during the opening, on 10th September 1996. at 12.

Hrvatska Radio-Televizije reserves the right to: accept or refuse every bid, cancel the competition and reject all blds at all times before the signing of e contract and according to this will not bear any expenses in connection. with the participation of the bidders in the competition, or bear any responsibility toward the rejected bidders, end will not be under any. obligation to explain the reason's of it's decision.

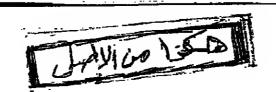
The offers must be submitted in e sealed. envelope with designation ne otvarati-za javni netjecaj-oprema" ("Do not open-for public competition-bid invitation-equipment") to the address: Hrvatska Radio-Televizija, Export Import Dept. 10000 Zagreb, Prisavlje 3, Croatia

> Croatian Radio-Television Commercial Dept. Export Import Zagreb, Prisavlje 3 CROATIA

# FT/S&P ACTUARIES WORLD INDICES NATIONAL AND REGIONAL MARKETS

NEGICIOL MATREIS	_			DIADK! 2	OFL 1 11				4.0		JUNE 2	1990 -		DQ		
Figures in parentheses U		Day's	Pound			Local	Local	Gross	ua	Pound			Local		-	Year
		Change	Sterling	Yen	DM.	Currency		Div.	Dollar	Sterling	Yen			52 week		ago
of stock Inc	lex_	%	Index	Index	Index	Index	on day	Yield	Index	Index	Inciex	Index	Index	High	Low	(approx)
Australia (79)	1.80	0.2	192,32	139.78	159.84	170.44	0.1	4.32	201.44	192.21	139.66	159.41	170.22	212.18	163,30	163.98
Austria (24) 18		-1.4	172,91	125.67	143.71	143.65	-1.3	1.86	183.92		127.52	145.55		198.96	166.11	167,48
Belgtum (27)21		8.0	200.62	145.81	166.73		0.7	4.09	209.18		145.02	165.53		215.81	196.08	
Brazii (28)18		1.5	172.23	125.18	143.15		1.4	1,98	178.13		123.51	140.97	329.23	181.89	123.97	
Canada (120)16		0.2	152.53	110.86	126.77	167,93	0.0	2.29	159.70		110.72	126.38		165.12	134.14	
Donmark (30)	4.70	0.5	290.38	211.05	241.84		8.0	1.89	303.00	289.21	210.14	239.86		305.17	278.53	
Finland (23)19		1.2	185.05	134.49	153,79		1.3	2.64	191.83	183.05	133.00	151.81	187.05	278.11	171.73	
France (96)16		-0.3	187.87	136.54	156.14	159.33	-0.3	3.02	197,80		137.14	156.54		198.39	167.70	
Germany (58)17		مە	164.18	118.31	136,44	138.44	0.1	1.82	172.32		118.47	136.37	136.37	174.38	155.86	
Hong Kong (59)43	0.58	-0.3	410.35	298.24	341.04	427.91	-0.3	3.33	431.89	411.B1	299.30	341.63	429.02	451.18	348.81	
Indonesia (27)21		0.8	205.91	149.65	171.13		0.8	1.48	214.14		148.47	169.47	305.78			-
Ireland (16)28		ãã	273.42	198.72	227.24	252.78	-0.1	3.39	288.95		198.95	227.08		290.82	235.88	236.58
haly (59)		-0.B	77,31	56.18	64.26		B.D-	2.37	81.90	78.15	58.78	64.82	93.77	84.53	87.22	
Japan (481)15		-0.1	149.18	108.41	123.97	108.41	-0.2	0.71	156.65		108.61	123.97	108.61	164,68	137.75	
Мајаувіа (107)58		0.1	533.94	388.07	443.76		0.0	1.67	559.44	533.81	387.88	442.73	537.64	585.09	425.77	530.02
Mexico (18)122		-1.1	1162.67	645.17		10168.00	-0.5	1.31	1233.34		855.11		10221,42	1325.65	791.99	
Netherland (19)		-0.4	282.60	205.39	234.87	231.26	-0.3	3.12	297.87	284.03	208.38	235.57	231.91	299.69	245.79	
New Zepland (15)8		0.2	76.50	55.60	63.58	62.21	0.2	4.36	80.09	78.42	55.53	63.36	62.08	85.49	75.94	78.86
Norway (35)25		1.1	241.53	175.54	200.74		1.2	2.00	250.68	239.20	173.81	198,38	221.05	256.04	222.24	
Philippines (22)21		0.4	204.86	148.89	170.26		0.3	0.54	214.14	204,33	148.47	159.47	279.60		222.24	200-14
Singapore (44)41		-0.5	395.51	287.46	328.71	269.86	-0.5	1.41	416.98	397.88	289.11	329.99	271.23	465.21	355.81	383.37
South Ainca (44)36		-0.5	343.79	249.86	285.73	341.45	-0.5	2.12	382.38	345.78	251.25	286.78	343.00	437.76	339.37	343.41
Spain (37)16		0.3	175.21	127,34	145,61	178.53	0.3	3.20	183.29	174.89	127.08	145.05	178.03	183.85		
Sweden (48)35		0.3	341.56	248.24	283.87	352.59	0.4	2.41	357.35	340.98	247.78	282.80	351.04	360.77	145.15	
Switzerland (38)		0.1	232.80	169.20	193.48	189.16	-0.1	1.56	244.10	232.81	169.24	193.17	189.42	252.34	269.58	
Thatand (45)16		0.1	158.59	115.26	131.80	163.95	0.0	2.01	166.31	158.69	115.31	131.61	163.95		191.24	
			223.69								181.83	184.72		183.95	146.74	
United Kingdom (200)23		0.6		162.57	185.91	223.89	0.4	4.17	233.41	222.72	189.09		222,72	237.43	213.27	213.27
USA (627)Z7	3.06	0.8	262.13	190.51	217.86	275.06	8.0	2.18	272.73	260.23	189.08	215.83	272.73	278.47	222.54	222,54
Americas (793)	1.09	0.8	239.29	173.91	198.87	211.09	0.8	2.14	249.05	237.64	172.68	167.09	209.38	252.43	203.60	203.80
Europe (711),21		0.1	201.88	146.71	167.77	185.02	0.1	208	211.52	201.83	148.65	167.39	184.80	211.82	188.21	188.21
Nordic (136)30		0.5	292.16	212.34	242.82	265.65	0.7	2.32	304.93	290.96	211.42	241.32	263.93	306.61	261.13	261.37
Pacific Basin (879)		-0.1	161.27	117.21	134.03	119.31	-0.2	1.16	169.35	181.59	117.42	134.02	118.51	177.01	148.86	152.76
Euro-Pacific (1590)		0.0	178.08	128.43	148.00	144.24	0.0	2.05	186.81	178.26	129.52	147.84	144.29	190.57	186.51	187.44
North America (7-17)		0.8	255.35	185.59	212.23	267.22	8.0	2.15	285.75	253.57	184.25	210.31	285.05	288.52		
Europe Ex. UK (511)19		-0.1	184.89	134.37	153.85	161.23	-0.1	2.46	194.16	185.27	134.62	153.65	161.31		217.62	217.62
Pocific Ex. Japan (398) 28		0.0	274.40	199.43			-0.1	2.86		274.80	199.67	227.91		194.18	189.85	170.25
		0.0			228,08	248.71		2.05	287.99		130.35	148.78	248.88	296.68	243.50	250.53
World Ex. US (1800)18			179.23	130.26	148.95	145.60	0.0		188.01	179.39			148.70	191.58	167,38	168.38
World Ex. UK (2227)21		0.4	202.87	147.52	168.69	180.94	0.3	1.89	212.20	202.48	147.13	167.93	180.32	213.05	182,12	
World Ex. Japan (1946)24	(23	0.5	235.63	171.25	195.83	233.95	0.5	2.50	245.98	234.71	170.54	194.66	232.77	<u> 247.55</u>	208.79	208.79
The World Index (2427)21	4.96	8.4	204.89	148.89	170.26	185,05	0.3	2.09	214.14	204.33	148.47	169,47	184.40	214,96	184.85	184.85
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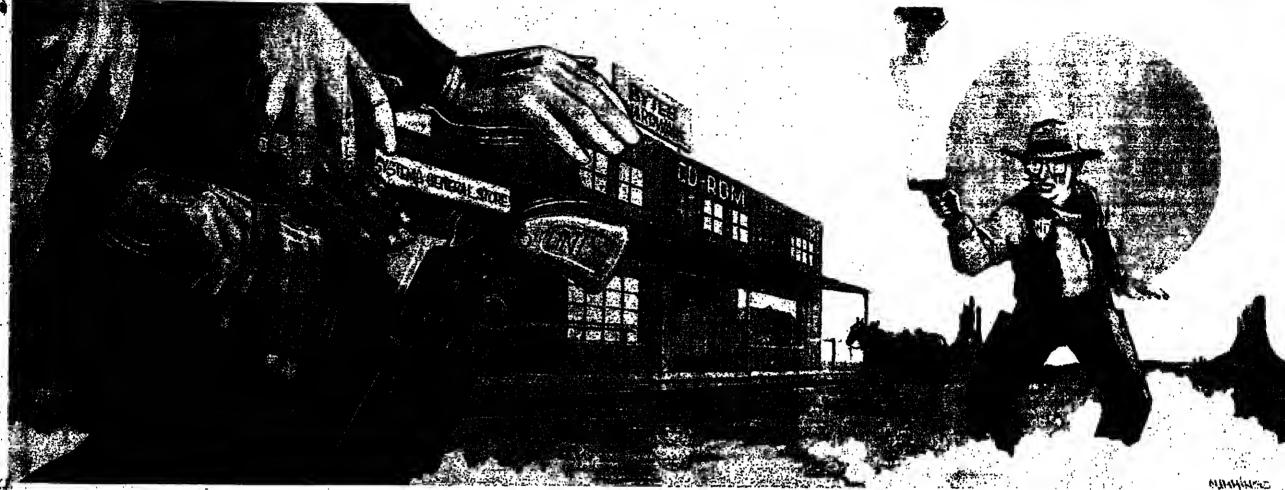
Perspectives Martin Bangemann Pace-setter on the infobahn

Rush for market dominance Page 15

# Information Technology

Wednesday July 3 1996

FINANCIAL TIMES REVIEW



t's a classic showdown between an old hand and a young upstart. Nearly four years ago, Microsoft launched Windows NT (New Technology), a new "industrial strength" computer operating system which the world's largest software company promised would change the face of corporate computing.

Now, after a slow start, a growing numthat NT is finally mature enough to be taken seriously as an alternative to their old-but-reliable Unix-based systems.

This alone represents a remarkable. about turn. Only a few years ago, NT was being written off as another unreliable and over-hyped failure. Now, as Microsoft prepares to launch the next version of NT, which boasts a Windows 95-style user interface, it is viewed as a viable solution, especially for departmental servers. Some bolder companies have begun evaluating its potential for enterprise or corporate-

The initial uptake of NT was much slower than many analysts and industry pundits had expected. By last year, NT had secured only one per cent of the total operating system market, according to Dataquest figures:

Nevertheless, Microsoft professes to be pleased with NT's progress, particularly in financial institutions. At the important departmental server level, NT does now appear to be making big strides. The latest research figures from consultants IDC reveal that NT had seven per cent of the worldwide networking market, compared with 11 per cent for both Unix and IBM's OS/2, and 45 per cent for Novell Network, the market leader.

What is more, research groups such as Dataquest predict that NT will make further significant gains over the next few years. By the end of the decade, Dataquest s expecting NT to have secured more than 40 per cent of the operating system mar-

# Shoot-out ahead over control of corporate network systems

The next 18 months are likely to be crucial in the battle between Unix and Windows NT for control of corporate departmental network systems. For Microsoft, which has bet its future on NT, it will also be a decisive period, writes Paul Taylor

vendors such as Digital Equipment predict that, by the year 2000, Unix and Windows NT will be level-pegging in the crucial server market - each accounting for about 40 per cent of server revenues, leaving the remaining 20 per cent to be shared out

among so-called 'legacy systems'. So what is driving the corporate IT world into Microsoft's arms? Aside from Microsoft's aggressive marketing campaign, there are a number of key factors working in NT'e favour.

Among these, there has been growing distillusionment with Unix which, critics argue, has failed to deliver on its promise of ubiquitous open system computing and interoperability.

Indeed, Unix remains a collection of simflar but not identical operating systems which, with very few exceptions, will run on only one computer platform. Thus, AIX runs on computers of various sizes, but all made by International Business Machines. Meanwhile, Hewlett-Packard, Sun and other hardware vendors back their own Unix variants.

"Unix missed the chance to come together," says Hasso Plattner, vice chairman of SAP, the German software group, echoing an increasingly widely held view.
What is more, moving Unix applications to new platforms involves not just recomcode', raising the cost of developing new applications and after sales support. In contrast, NT appears to be much bet-ter positioned than Unix to take advantage of standard off-the-shelf hardware and software, particularly machines based on intel microprocessors. NT also runs on Digital's Alpha servers, those using Silicon Graphics Mips chips and on IBM and

Motorola PowerPCs. As a result, although NT applications which include all Windows 95 applications, since they are based on the same core technology - have to be recompiled for each hardware platform, they do not have

to be rewritten, offering a big advantage in terms of cost and flexibility. Microsoft has also built powerful alliances to support NT with hardware ven-dors, such as Digital, and software compa-

nies, such as SAP. It has also encouraged software developers to use an extended list of development tools to build applications using NT. As Platiner of SAP notes: "Developers have switched to NT. Not everyone will tike

that, but it is true." NT also makes it easier to integrate popular Office and Back-Office suites. For some buyers, picking Microsoft is a reassuringly safe bet because its dominance of

For business customers one of the most important factors will be cost of ownership and Windows NT scores in this area too. Not only are Windows NT based systems generally reckoned to be easier to set up and configure than their Unix rivals, they

are also easier and cheaper to maintain. "As Windows NT penetrates traditional Unix markets, support is becoming a key competitive weapon," notes Input, the IIK-

"The complexity of Unix relative to Windows NT makes it more expensive to support. Additionally, there is a flourishing organisations a wide choice of external support contracts."

## Competitors

Meanwhile, the introduction of higher performance Alpha processors from Digital Equipment and faster Pentium processors from Intel have helped NT compete more effectively with the fast 'Unix boxes' sold by Sun Microsystems and other com-

mitted Unix vendors. But NT is not the only server operating system that can take advantage of cost-effective Intel-based hardware. So, too, can Novell NetWare, IBM OS/2, and SCO Unix, which is already running on about two million x86-based servers - more than any other version of Unix, according to SCO. "Ohviously, there must be additional reasons why increasing numbers of MIS managers are choosing NT," said Byte Maga-

zine, in a recent report. One factor, say corporate users, is that It is easier to integrate Windows NT with their existing hardware and software. Companies which already have Windows PCs on their desktops naturally lean toward NT when they have to choose among server options. They would rather deal with a single OS vendor, and NT has an instantly familiar look and feel.

But despite NT's ascendancy, most independent analysts agree that Unix still has some key advantages which are likely to ensure that it not only survives, but thrives in some environments, particularly large-scale enterprise-wide and high performance systems.

In terms of performance, the low-priced PC-servers are limited by their internal architecture when they try to tackle the really big jobs. Even the best Intel-based servers have trouble keeping up with the fastest Unix machines, especially when managing large databases developed using database software from vendors such as

Oracle, Sybase, or Informix.

As databases grow, the scaling ability and robusiness of Windows NT are still big concerns for many large corporate cus-

omers, which is why even those who have bought into Microsoft's NT strategy, still have some Unix boxes.

Despite Microsoft's claims, most independent consultants argue that NT still lacks the scaleability of Unix systems - an advantage that Unix is likely to retain for some time. As a result, many companies are choosing to mix NT and Unix-based computer systems - and expanding their use of both platforms.

For small or medium-sized installations. typically departmental networks, they use Windows NT running on low-end servers containing four or fewer processors, but continue to deploy Unix servers where bigger systems are required.

"Windows NT is deficitely gaining ground in corporate installations, but because the global computer market continues to expand at a prodigious rate, NT is not killing off Unix. On the contrary. Unix is likely to thrive into the next ceotury," says Bute.

But as standardised Windows NT applications increase in variety, scope and quality, others argue that there is only one eventual outcome.

"There may be resentment of Microsoft within the computer industry and eveo among users," sald a leader in the Infospectives journal in January, entitled "The

"But practical considerations will, in the end, determine the course of action businesses must take. If Unix software is substantially more costly than equivalent NT software. Unix software will not be as pop-

After all, the main reason Unix became successful was that it was cheaper for a software developer to reach a large market with a Unix program than with a program

"The Unix situation is nothing less than tragic," sald Infospectives. "The bubris that led to AIX being different from HP-UX is now going to lead to the demise



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I Interview with John Chambers

# Ahead of the pack on the information superhighway

"When you are growing at 90 per cent a year, I can tell you, your knees shake," says the president and chief executive of Cisco Systems. He is interviewed here by Louise Kehoe

The world's leading manufacturer of internetworking equipment, Cisco has supplied more than 80 per cent of the "routers" – data traffic direc-tors – for Intercet links worldwide. It is also In poll position as husinesses huild private "intranets" and as telephone companies rush to participate in the merger of voice and data communications. Yet another potentially huge market, networking equipment for the home, may be just around the

"In this industry we measure life in 'dog years'. We cram aeven years into every year . . . the pace is unbelievable," says Chambers.

Bringing new products to market at breakneck speed is critical. Learning, as a young company, to provide customer support and service in the style of a mature industry is

To create a broad product line quickly, the company has augmented in-house development with licensing agreements, partnerships and and acquisitions. Over the past three years. Cisco has acquired ten smaller companies, culminating In the pending \$4bn pur-

Yet as data networks become part of the fabric of husiness operations as well as public services, there are advantages to having a single supplier for a full range of equipment. Cisco claims. "The products work seamlessly together and we can work with customers to create solutions that fit their needs," says Mr Chambers.

"Networking is of such strategic importance that customers lean in favour of a vendor that can provide a high level of service and support, and one that has international capability, as well as financial staying

isco's customers now view internetworking not only as a productivity tool, but critical to their competitiveness, he explains -"for some. It is a matter of survival". He adds: "We are just scratching the surface in terms of the amount of traffic going over the Internet."

Demand for network capacity will continue to increase. he predicts. "In inter-networking, everything has occurred much faster than we originally projected. Our customers tend to adopt our products at a much quicker pace than we expect. The same will be true

ohn Chambers is at the ing producer of switching of broadband (network) wheel of the fastest race equipment for high speed data requirements for husinesses car oo the information networks.

"Very often, when people are projecting how much traffic there will be on a [new] highway, they base their figures on who is driving on the back roads today. But when you build the highway a lot of people use it who would not have travelled before. They use it as a way to get to areas that per haps they would not have gone

Similarly, he believes, demand for broadband services to the home will mushroom as aoon as these networks are available. The key to opening this potentially huge new market is putting the technology in place at the right price, he

There must, however, be some "driver applications" that persuade telephone and cable companies to invest In upgrading their networks, he acknowledges. Interactive television trials have demonatrated that "video-on-demand is not the driver application, as people originally thought". But there will be other compelling applications, he believes.

These applications may be different for different parts of the population, he suggests. "For me, it was a combination of factors. I got frustrated with



my presentations without having to drive to the office, and access to various news sources

The initial users of broadband networks will be businesses and young professionals in their homes, he suggests. With more and more US colleges and universities providing students with access to high-speed networks in their dormitories, "we are now dealing with a whole generation of young professionals who appreciate how to use this technology and what it can do

Several technologies including ISDN, ASDL and (television) cable networks will be part of the solution to making high speed data network access more widely available, Mr Chambers believes. "We have no religion when it comes to technology. We want to solve the problem and wa think it will take a combination of technologies to do

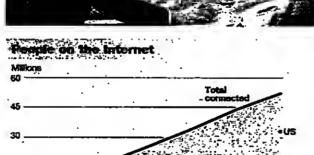
Higher-speed access is not the only hurdle to better performance of the Internet, however, as many PC users who have upgraded their modems from 14.4 kilobaud to the latest 28.8 kilobaud models are now discovering.

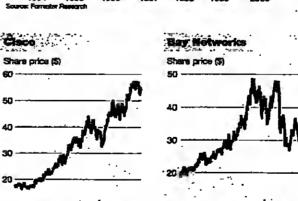
People often sit in a traffic jam and wonder what the cause is: there can be lots of different reasons for a hold-up on the highway." Mr Chambers observes. Similarly, on the Internet there are many points at which data traffic can be beld up.

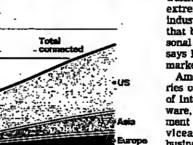
"It may be the link to the service provider, but often a traffic jam can occur on the feeder highways, or at intersections." All the elements of the network need to be improved to assure the free flow of data traffic, he explains. "We will make products that allow the intersections to move faster, but we also need wider highways as well as software to balance the flow of traffic automatically."

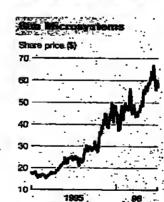
There will be an increased focus on reliability of the Inter-net, he says. "What was an acceptable performance a year ago is not acceptable today and next year will be something that you get thrown out for. Early users of the Internet tolerated a level of reliability that will not be acceptable in a year or two."











# Networks now vital to corporate effectiveness

Enterprise computing . By Louise Kehoe

Revenues for Internet-related products and services will rise from an estimated \$4.95bn in 1995 to more than \$36bn by the year 2000, analysts predict

estimated compound annual growth rate of 38 per cent from

now until the year 2000," say Mary Meeker and Chris DePuy of Mogan Stanley in The Inter-

net Report, published earlier

those for PCs, servers, semi-conductors and telecom ser-

vices are also expected to see

strong growth as a result of

this year. Markets snch as

hen Sun Microsys-tems colned the phrase "the network is the computer" in the 1980s, It was largely an aspiration. Today, it is a truism that few in the information technology industry would question.

Networks - local, wide area and global - are defining a new model of information processing that reaches beyond the distributed or "clientserver" approaches to allow any computer to link with another to swap data or pro-

In the husiness environment, networks are enabling employees to accesa information quickly, allowing them to make hetter informed decisions. Networks also enable collaboration among workgroups and are increasingly used to improve communications among suppliers and cus-

Companies now view networks not only as a productivity tool, but critical to their competitiveness, says John Chambers, chief executive of Cisco Systems, tha leading data networking equipment

At the heart of this trend are the communications protocols and software standards of the Internet, From its genesis in the late 1960s, linking four computers et US Department of Defense sites In California and Nevada, the Internet has evolved into a global web of networks that anyone, almost anywhere in the world, with a personal computer and modem can tap into.

The Internet communications protocol, TCP/IP, has also become a de focto standard fur private enterprise networks, or "intranets". It enables computers to communicate regardless of which operating system they

Mosaic World Wide Web browser software, commercialised by Netscape Communications and others, is now expected to become the standard user interface for office computers. This will enable users locate information, whether it be stored on the hard disk of a personal computer or on a server in a remote country, in the same way.

"The Internet and the World Wide Web are triggering a transition to another period of extreme growth in the IT industry that may well dwarf that brought about by the personal computer (in the 1980s), says Frank Gens, of IDC, a US market research group.

Among the early beneficia-ries of this trend are suppliers of Internet hardware and software, data networking equipment and Internet access servicea. "We helieve new husinesses that are created hy or for the internet marketplace will grow very rapidly, at an

the Internet hoom. Among the biggest winners will be data networking equip-ment suppliers such as Cisco Systems, Bay Networks, 3Com. Ascend Communications and Cascade. This market has been growing at a rate of 60-70 per cent over the past year and is expected to maintain at least a 50 per cent growth rate over the next 12-18 months, according to analysts ot Salomon

Cisco Systems leads this group with an estimated 80 per cent share of the market for Internet "heckbone routers" which direct data traffic on the Internet. The advent of high speed data communications technologies such as ATM and Frame Relay will create increased demand for network

The trend toward Internet and intranet computing is challenging established IT leaders

upgrades, further boosting sales of data networking equipment, analysts predict.

Security hardware and software represent another booming segment of the networking market. As compaoles link their internal networks to the outside world, security has become a serious concern. Firewalls, designed to prevent unwanted intruders, encryption software to protect the privacy of messages sent via the Internet and authentication software and services are becoming essential elements of enterprise networks.

Sales of Internet-related security equipment and software were an estimated \$200m last year and will blossom to \$1bn by the end of the decade. the Morgan Stanley analysts

Internet access and service providers (ISPs) have been among the most visible early beneficiaries of the Internet "gold rush". New competition from large telephone companies such as AT&T and established online information services such as America Online is, however, challenging the pioneers of this segment of the networking industry.

Despite rising demand, an industry shakeout seems inevitable. Already in the US, for example, AT&T's entry into the market has forced several other ISPa to reduce prices. The market is also fragmenting as some ISPs focus on consumer services, while others are concentrating on high speed Internet access for husi-

While the trend toward Internet and intranet computing is creating new opportunities, it also challenging established IT leaders. In the browser software market, for example, Net-scape Communications and Microsoft are engaged in an to 100 per cent a year.

all-out battle for market share. Microsoft is scheduled to launch the third version of its. Internet Explorer later this summer, and claims that the new program will overtake Netscape with new features. Microsoft

nnounced plans for a new version of Windows, expected next year, that will adopt the browser as its primary user Interface. Netscape, however, is fighting back. The curren market leader, with an estimated 80 per ceot market share. Notscape is launching new versions of its Navigator program every few months. Moreover, Netscape is expand ing the role of the browser to create what is, in effect, a new, PC operating system.

For the first time in many years, Microsoft faces a tredihie challenge to its domination of the desktop computer envi-ronment. The risk Microsoft. faces is that third party software developers will turn their attention to creating Internet intronet applicatione, rather than only for Windows.

Scott McNealy, Sun Microsystems chief executive, is coninced that this will happen He envisages hoards of small start-up software companies writing programs using Java Sun's new platform independent Internet programming language. These programs, he says, will be stores on serving and downloaded to desktop computers only when needed, Instead of going after just the Windowa market they can write for Windows Macintos UNIX, OS/2, mainframes as well as new Network Computing platforms," says Mr

Larry Ellison of Oracle has also been promoting the "Network Computer" or "Internet oppliance"; a low-cost terminal that will enable users to download software and data from the Internet and intranets.

About two dozen companies hava committed to manufacturing Network Computers, or components for this new category of devices. The first models will be introduced by September, says Mr Ellison, with broad availability expected by the middle of next year.

Some industry observers view the Network Computer as a threat to personal computer manufacturers and to intel, the leading supplier of mlcroprocessor chips to the PC industry. Mr Ellison, however, expects Network Computers to augment the use of PCs; rather than replace them. Several of today'a leading PC manufactur ers will soon be offering NCs. he says. Moreover, intel will be the primary supplier of chips for Network Computers, Mr Ellison predicts.

The corporate application of NCs will be "very important" he says. "It addresses the serous problem of the rising cost of computing." In the con sumer sector, NCs are expected to take many forms. One of the most promising applications. however, is multimedia elec tronic mail, says Mr Ellison He anticipates that electronic messages that may include graphics, video and sound, will "enormously popular".

Within a decade occess to Internet-style data networks may be ubiquitous in the US. with other industrialised countries following a few years later, industry analysts pre-dict, and with the number of users growing at a rate of close:



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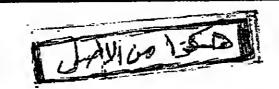
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store large amounts of data for use over computer networks. These differences can range from the kinds of network software supported and the back-up options offered to the sor capabilities - which can significantly enhance server performance by allowing a single server to use more than one computer processor - are implemented. IBM, for example, announced

in June the launch of "the IBM PC Server Compatibility Program" - described as "a set of co-operative relationships between IBM and selected providers of PC hardware options and applications".

The goal of the program is to test compatibility of other vendors' products with IBM PC Servers. Initial program participants includa 3COM, Intel, Madge Networks, Mylex/Buslogic. Olicom and Standard Microsystems Corporation. (SMC). Meanwhile, arch-rival Compaq Computer teamed up with Intel, the leading computer chip-maker, to unveil an effort it is calling "Pacesetter '96" to conduct software integration and optimisation testing on Compaq's ProLiant 5000 systems, using Intel Pentium Pro processors.

In addition to testing and integrating their software on the new ProLiant platform, Compaq says "Pacesetter '96" participants are praparing evaluation reports to assist customers migrating or installing business-critical applications on the new ProLiant 5000. The company says these evaluation reports will help customers worldwide obtain optinium performance, reliability and scaleability for their business-critical computing applications.

"Compaq, Intel and their partners have jointly con-ducted months of comprehensive testing to daliver the

another in building industry alliances that will give an edge to their range of products nlike the desktop comgrated, optimised, reliable and powerful solutions for business-critical applications," leading enterprise application puter market, where the specifications of one product in a given cate-gory are much like any other. claims Gary Stimac, the senior vice president and general there are real differences in the manager of Compaq Systems design of - and standards used Division by - PC servers designed to

Whether the application is for the Internet or an intranet, transaction-processing or decision-support, with Pacesetter '96 Compaq has ensured that customers can immediately deploy enterprise-class applications on the ProLiant 5000 and Pentium Pro technology."

Intel, of course, is equally trying to get customers for server systems to demand use of its top-end Pentium Pro pro-

"Intel worked with Compaq on the Pacesetter '96 programme to give customers the best possible performance on Pentium Pro processor-based ProLiant systems running the enterprise solutions of these leading software companies," enthuses Dave House, senior vice president and general house, LLP, SAP Ameri manager of Intel's enterprise SHL, Sybase and ViewStar.

vendors with early access to ProLiant 5000 systems to ensure their products are fully tested, optimised and inte-

grated for the new SMP Pentium Pro processor-based

> Intel and Compaq are working on the 'Pacesetter 96' project

Participants in the Paceset-ter '96 program include Andersen Consulting, Arbor Software, Autodesk, Baan, BMC Software, Computar Associates, FileNet, Informix Software, ISOCOR, Lotus Development, Microsoft, Novell, Open Text. Oracle. Price Water-

Hardware developments . By Tom Foremski

Equipment: personal computer 'servers' . By Geoffrey Wheelwright

Suppliers race to build alliances

Key players in the market for up-market personal computer 'servers' are working hard to outdo one

Meanwhile, Digital Equip-ment Corporation has earned a unique distinction with a new partnership it has established in Canada for server products based on Digital's Alpha com-

Digital's Alpha 64-bit computer sarvers bave been selected to bost Canada'a Internet Payment Processing aervice, the first Interac compliant home shopping and

banking system. The AlphaServer Model 1000 and 2100 systems will provide the computer power to run Canada's virtual shopping mall, including hosting retail and financial Web sites and processing consumer transac-

"We aelected AlphaServers as the technology of choice to run Canada's online shopping because of its processing power and performance.

"One of the major compo nents to our success will lie in our ability to provide the 'shopper' with easy and fast

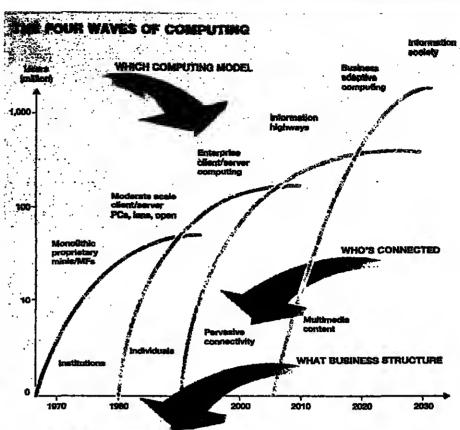
access," explains Gary Bart-

holomew, president of the Pay-Pro Network. More than 20 Digital AlphaServers will handle computer-intensive applications, such as database software and data warehousing, as well as running the service's Windows NT applications.

"Digital has been extremely visible as a leader in Internet computing. This established expertise along with the flexibility and power of the AlphaS-erver made it very apparent needed to build our service upon," says Weyne Simpson, executive vice-president of operations at the Pay Pro Net-

equipped to handle multiple and multi-function transactions and contain the 'scaleability' that will allow us to quickly and easily expand our system es our retail and con-

Internet computing: recasting the dynamics of the software industry - see report, page 15



announcement will enable cus

tomers to select and integrate

best-of-breed technologies that

will debyer the performance

and quality of service essential

to next-generatioo applica-

tions," said Andy Ludwick

president and chief executive

"As networks become more

complex, customers face

increasingly difficult issues

related to standards and com-

patibility," said Nick Lippis,

president of Strategic Net-

"This announcement provides a forum for addressing these inter-operability chai-

lenges and is a welcoma move

Masri says that technologies

such as ATM will help compa-

nies build fast Lans that can

handle multimedia data such

Continued on next page

of Bay Networks.

works Consulting.

for the industry."

The third wave of computing is where most corporations are today

# More flexible routes for network growth

Stackable hubs allow network equipment and users to be added without disrupting the whole system

s networks become more important to businesses, Companies that provide networking equipment - such as hubs, routers, switches and bridges - are trying to make it simpler and less expensive to set up and manage networks, especially for smaller offices.

stackable hnbs. These hubs connect local area networks (Lans) and act as the connection between Lans. They used to be fairly formidable pieces of equipment, requiring a reasonable amount of expertise to set up and manage. But this is

These can be as simple to use as plugging in wires and running installation software. Stackable hubs are a cross

between the more complex and larger chassis-based hubs and simpler stand-alone hubs, with some of the best features of both. Stackable hubs are available for all types of network such as Ethernet or Token Ring. They have a small footprint, which makes them ideal for smaller organisations and offices. And they can be combined to grow with a company and allow users easily to expand their networks.

One important trend is in As their name implies, stackable hubs can be stacked on top of each other as the need arises. They are also easier to manage: a stackable hub might cost about \$45 a user compared with the less versatile but cheaper stand-alone bubs at about £20 a user, but much less

bring out stackable hubs, than a chassis-based hob, which is designed for larger numbers of users and may cost. as much as £100 a user.

Improvements in network management software mean that users can add stackable bubs and manage them as a single entity, abie to spot problems before they arise, and make it easier to configure the network for new users.

#### Vendors

Stackable hubs are available from several vendors with some of the more popular products coming from companies such as 3Com, Hewiett-Packard, Bay Networks, Standard Microsystems and Digital Equipment Corporation.

3Com is e ploneer in providing stackable hubs and it plans to launch a new generation of its SuperStack stackable hubs in August, These hubs will have aeveral new features, including electronic port switching for adding users.

The company is confident that port switching will be a popular feature, especially among customers that have to add or remove large numbers of users on a regular basis. "One of our customers is a iarge petroleum company and

its headquarters staff move as it brings in people for training. We will be the first with port switching at a breakthrough price, which will make it easier to add users to the network and also save on staff costs in terms of managing and maintaining the network," seys Edgar Masri, vice-president and general manager at 3Com's premises distribution division.

Other new features will make the hub more robust by including a hot-swap capability that allows users to add netnetwork, says Masri. And improved remote monitoring software will also be available to track network performance, spot potential problems and identify which components in the network need repair or

work equipment and users

without disrupting the entire

every year about 75 per cent of Standards 3Com recently joined with

IBM and Bay Networks to announce a common set of standards and specifications that will make it possible for users to mix and match network equipment from different vendors without compatibility problems. The common specifications cover routers, hubs, inter-networking and ATM (or asynchronous transfer mode) technology for building very as large video, graphics and

fast networks. "This inter-operability

# computing

Since the beginning of professional computing there have been three distinct ways of building computer systems - these have been 'waves' of computing which began with mainframes alongside dumb terminals; the second wave was the mini-computer.
The third and current wave

**Evolution** of

is typified by PC-based networks, connected through centralised data repositories.

ln a new gulder called 'Intranet Essentials', Soo Microsystems says the next wave of computing is the Intranet, defined as 'deploying Internet technology inside an organisation'. An Intranet needs no link to the global Internet. Much of the technology that allows organisations to build Intranets is rooted in the Net and the World Wide Web. Recent estimates suggest there could be 500m Internet users by the year 2000, compared with 60m today. \*E-mail details: Matt Reid@uk.sun.com

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Managing the network • By Tom Foremski

# Support services do not come cheaply

Planning for a network failure is an important task which some companies fail to carry out adequately. There is also a need to measure the true effectiveness of company help-desks

network, companies must make sure that they can support their users through help-desks and have the necessary staff and tools to help manage the network. As companies grow in size, their networks become increasingly complicated as new users are added, other users leave

the company, and as the capaclty of the network is opgraded with new equipment from multiple vendors. And there is the issue of emergency planning in the event of a network failure which could bring a company's business to its knees if the network cannot be restored quickly enough.

Help-desks are a key componeot of a business network. levels of computer expertise and even the best-trained staff ofteo need to talk with ao in-house expert to solve the inevitable problems that arise. But support services are a

big expense for companies. US market research firm Dataquest, says support services of IT spending and that many companies spend more than 50 per cent of their IT budget on external and internal support

"What we see with clients is that as network activity increases, activity related to help-desks also increases, but help-desks can often be overlooked as a key factor," says Don Cleavinger, chief technologist for the information services and communications

that EDS offers belp-desk services for clients and has developed a methodology that makes them more effective.

"We have seen many missystem upgrade, the help-desk people are sometimes not informed of the changes and so they can't belp users with their problems. There is also a necessity to set up metrics to measure the effectiveoess of the belp-desk, otherwise you cannot indge how useful the help-desk is to the organisasays Cleavinger.

The popularity of the Internet has led to new approaches to help-desks which take advantage of different time zones. Astea International is offering clieot/server software sites that will route calls from users to a belp desk. If an enduser in London, for example has a problem in the middle of the night, their call for help can be routed to a help desk in Australia where there are staff

World wide weh sites are also useful in collecting information on fixes to common problems. Before talking with a help-desk expert, users can check a web site for information on solving their problem. Again, this is useful when help is required outside of help-desk

office hours. Problems in the network ltself are another category which affects users, but is usually related to a hardware failure somewhere on the network. Fortunately, spotting

hardware problems has

remote diagnostics software which can spot potential problems and locate where failures have occurred. In the past, it used to be a hig task pinpointing where the hardware failure was, a task that become more

These days, most of the com-ponents in a network have chips which identify themselves to the network management software and relay information about their current

lanning for a network failure is an important task which some compa nies fail to carry out adequately, says Kevin Bishop European and Middle East marketing manager at IBM Networking Products.

The order in which you

bring up a network after there has been a failure is important," says Bishop. "In some companies, the accounting up first, because we need to send out involces or bills', but this is usually wrong. You can always catch up with the accounts and send out hills a coupte of days late, but if the network serving your sales staff goes down, then you don't have any way of generating new sales because there is no way of catching up with lost

Bishop says that IBM will perform an audit of a company's network to determine which parts are essential to the ss and to put together a plan of recovery in the event of a network failure and recommend the best strategy for performing back-ups.

IBM also helps companies

with the network infrastructure, where to place equipment and take other measures to ensure a 24-hour, seven-day operation. Staff are led through practice crisis trials so that when a big problem arises, the steps to be taken are more familiar and executed more

There are trends in remote diagnostics software that make it easier to put together networks with a mixture of hardware and software from different vendors and have a single management system. Previously, network management software was specific to each vendor's networks, but now there are more industry standards and moves to improve

For example, IBM, 3Com and Bay Networks recently said that they would co-operate on developing common specifications that will make it easier to combine and manage their respective network products within one heterogeneous net-

Although the alliance is partly aimed at allowing the with network market leader Cisco Systems which has its own proprietary network management software, the move should help the end-user as the industry moves to adopt stan-

dard specifications.

To be able to mix-and-match forward and it will help to reduce the cost of installing and maintaining networks. Customers will be able to buy equipment based on features and price rather than being tied into one vendor because of possible compstibility prob-While installing and manag-

ing networks is a high priority for companies, the cost is cer-tain to be offset by the rewards of more efficient use of IT resources and better staff productivity.

# Network skills shortage

Demand will remain high at least until the end of the century, say researchers

etworking is now the area of greatest skills shortages - and is being made worse hy the fact that technical knowledge alone

is no longer enough.

That is the view of an industry already short of skills in different areas yet generally unwilling to train people in networking or offer them the right career path. In the UK, skills and problem

diagnosis tied as by far the hig-

gest management issues in a

new survey on local area networking hy research firm Spikes Cavell for UB Networks. In addition, almost 80 per cent of companies have had or are currently experiencing network skills shortages, according to recent research by recruitment group Delphi, again far more than those with staffing problems in other IT

Demand for Novell networking skills grew by 47 per cent to more than 7,500 vacancies to the 12 months to March and by 11 per cent in the first quarter of 1996 alone, according to a quarterly survey of joh adverfor trade journal Computer Weekly. There was similar growth in demand for Internet TCP/IP experience, while general local area network skills saw 22 per cent growth in the number of vacancies Microsoft Windows NT came into the top 20 for the first time at numbe 11, with 45 per cent growth in the first quarter of 1996 alone. or 6.859 vacancies over the 12 months. These findings are reflected in the fact that Novell, Windows NT and TCP/IP are now the top three courses in demand at the UK's biggest

high demand at least until the end of the century," says : Organisation and Technology Research (OTR). "It will be fuelled by large sustainable growth in the client-server market, growth in network products and services, underlying demand for jobs based on networked and distributed

concerning the so-called information highway." OTR sees the number of organisations adopting client-server systems increasing from around 20 per cent to 70 per cent hy 2000. Such statistics beg the question of where the people needed to fill the vacan-

systems, the increasing power of supplier companies which

aim their products at individu-

als and the desk-top, and com-

mercial and political pressure

cies will come from. Back-room technical jobs. typically designing, monitoring works linking scattered offices. offer new opportunities to tra-ditional mainframe systems programmers, the highly techrical specialists who know the inner workings of operating systems, according to Mr Clive South, a manager at recruitment group Software Personnel. These people saw only slow growth in demand for their skills in the early 1990s as. companies switched to chent-

server set-ups: However, most network activity is around the office, and IT people working here need another vital skill alongside their technical knowledge. The market needs people with technical experience but also the ability to talk to end-

users," Mr South says.
"Users are naturally inquisitive if someone brings in a new ing to their PC. You can't blind them with science: you have to be able to explain the benefits and what the system does without going into bits and

People coming out of higher education or from schemes to develop Modern Apprentices and others with the higher levels of National Vocational Qualifications are a source of

taught networking and personal computing and are increasingly also getting the necessary inter-personal skills," Mr South says.

Mr Paul Bútler, e director of Peritas, says most of the people going through the Novell, Windows NT and TCP/HP courses



Paul Butler of Peritas: 'A high : age of on-line students are

are IT specialists being reskilled. Peritas offers both traditional classroom courses and unline training combining self-study and discussion over the Internet, and Mr Butler save 'a high percentage" of online students are paying for

their own training. Strangely, however, after all the training, these different groups of people can find themwith the result that they leave, taking their skills with them. This is because they often end-up on the help-desk. This can be frustrating both to new

mers who have gone for retraining after years of main-

frame experience. "It's a real problem." Mr Butler says. "The help-desk is supporting IT infrastructures. especially networking, yet it is seen as a dead end, typically consisting of a supervisor and lot of people on phones. It has usually been regarded by companies as a necessary evil. located in a spare room near the FT department - and not taken seriously. Users ofter see it as no more than a barriel block their access to the IT

There is a need to raise the the help-desk, to give it credibility, both among users and as a career path. The staff need to be trained to handle calls professionally, to log problems and then monitor trends and establish an on-line knowledge base of common problems."

Mr Butler is optimistic about the future of the help-desk and therefore about its role in nurturing and retaining networking skills: Peritas help-desk courses are now seeing the third biggest growth in demand, after Windows NT and TCP/IP, and all these courses are "quickly booked

"A year ago the typical helpdesk salary was £11,000-£15,000, but far sighted companies are to £17,000-£19,000," Mr Butler says. "In these companies. tunior IT staff and those with some experience now see the help-desk as a good career ove and a place to get good initial experience in IT prod-

ucts and problems. D The Invisible Lan. by ikes Capell: 01635 550449; Delphi Group: 0171-440 2000: Periters: 01758 868181: 0171-402 3574: Softwore Personnel: 01203 690966. Callers outside the delete initial zero and add inter-

# onnectivity is defined by the Computer and Internet Dictionary – published in the US by Que –

IT training company, ICL's

as "the extent to which a given computer or program can func-tion in a network setting".

This points to one of the industry's biggest challenges, with which it has been struggling for more than a decade

and which is not fully resolved. For computers to function ting requires both compatibility of hardware and software and inter-operability of complete systems, enabling people and machines to communicate. In spite of efforts by official and unofficial standards bodies, boosting connectivity continues to demand considerable attention from suppliers and

It means grappling with several different technologies. from local area network (Lan) equipment such as gateways, servers end routers through various types of communications software to applications such as email, groupware and electronic commerc

System managers still have a maze of Lan specifications to negotiate. The announcement by Bay Networks, IBM and 3Com that they will form an "inter-operability alliance" to create common specifications could help bring order to the market, although at the outset the deal excluded Cisco, their chief competitor.

The connectivity challenge has become increasingly com-plex as more and more comcompany's main offices. Many employers have formed a policy of requiring staff to work at least some of the time from other places. These people need access to their corporate networks from remote branch offices, home offices, customer

# Manager Continues 1 1 2 4 2 6 5 6 7 7 Still in search of the missing link

As the number of remote network users grows, companies are seeking new ways to connect different technologies

sites, vehicles or hotels. There is another, similar set of problems associated with users accessing information from systems belonging to different organisations, such as the Internet and other online

The users of mobile computing are becoming more diverse, from the engine crews to financial consultants. Some companies now have several thonsand staff with remote access to their networks. Supporting such a mass of

Speed and security are crucial issues for systems managers

remote users is both a difficult management task and poten-tially very expensive. Mobile workers have often

acquired their own modems, creating problems for the control of the hardware or tha costs of its usage. Such costs mainly relate to telephone charges, especially if leased lines are involved, and to net-About 80 per cent of the cost

of remote access relates to telephone call charges and only 20 per cent to equipment, according to Phil Crocker, a director

of marketing for Shiva, a remote access product vendor. He emphasises the need to manage telecommunications

A principal cause of high. telephone call costs is that the IPX and SPX protocols used by st Lans based on Novell's NetWare were not designed to minimise call time.

The latest remote eccess software can have timers included to ensure that the use of telephone lines is optimised, netand routine updates are sent at off-peak periods.

Another cause of high costs is the tendency of users to make calls to suit themselves without thinking of the finan-

usually better for them to dial . in to the corporate Lan and get a connection from there." Network support costs are dmost equally critical. "They could cripple a company," says. Crocker. Ease-of-use is therefore a primary criterion in the design of remote access prod-

The spread of ISDN (integrated services digital net-work), the international public digital network, has made data communications hetween many remote sites feasible and hrought huge demand for

Speed and security are the most important issues for systems managers who are seeking to provide remote to John Birbeck, managing director of the remote access division of manufacturer Bay Networks (formerly Xylogics).

Users are starting to move from dial-up modems and leased lines, which are expensive solutions, to personal ISDN routers running at 64Kbit/s, he says.

These systems give user bandwidth-on-demand, that is the right amount of capacity for the often relatively short periods when it is needed

ISDN routers are often being chosen because remote access to a network and retrieval of "If mobile users call the data by modem or by ISDN ter-Internet directly, costs will minal adapters fitted into a PC rocket," warns Crocker. "It is have proved too slow, especially for uses such as the transfer of complex graphics.

Pershing, the financial services company, has been repla with ISDN routers for the past two years. Paul O'Sullivan, routers are much more cost-effective and easier to support. He hopes they will be installed at all 60 sites on his network by next year.

Many organisations have reached remote access speeds of about 64Kbit/s, but want 128Kbit/s to deliver a more satctory service to their net Continued on facing page

# Vendors target small office market

Continued from previous page

audio files. They will also help to ease congestion on net-

are also looking at oew markets, such as the rapidly growing small office and home office market, with products specifically designed for them. Cisco Systems recently intro

duced a modern-sized Etbernetto-ISDN router that can replace multiple telephone lines by several office

**EDM** 

machines such as personal computers, telephones and fax machines to share one ISDN connection. Cisco says that the Cisco 765 and 766 routers are designed for small offices and

International Data Corporation (IDC), the market research company, predicts continued strong growth in the local area network (Lan) market, especially for switches, which are increasingly competing with

routers as companies try to work market, routers still hold enhance the efficiency of their a dominant position, growing

Networks

Lans. IDC estimates that the Lan switch market grew from \$350m in 1994 to \$1.5bm in 1995. "Customers are clearly adopting large numbers of Lan switches to ease workgroup and backhone congestion, says Lee Doyle, analyst at IDC.

Router sales Although high-speed switches represent strong growth in the local area net-

in 1995 by 42 per cent to a \$3.7bn market and by 71 per cent in terms of unit sales. Although switches are taking on the role of routers in ecting as intermediaries between the backbone and the Lan, routers are in no danger of becoming obsolete.

Switches can be cheaper and easier to use than routers but router vendors report that customers are still buying routers but using them in different parts of the network in a complementary way.

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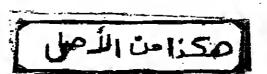
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Networking

Multimedia networking . By Phil Menchester

# Many hurdles to overcome

Data compression and ISDN links are improving the delivery of audio and video links over networks

The first wave of excitement about networked multimedia and its potential for new applications is being replaced by a more pragmatic view. Expectations have been lowered - partly because of increased exposure to the limitations of multimedia technology on the Internet and partly because pilot trials have not lived up to their early

There are several reasons for this. The standard telephone network is far too slow for video and andio, both of which depend on time synchronisation. The alternative - the integrated services digital network (ISDN) - is still relatively expensive to install and maintain. And the software technology required to provide multimedia services is complex.

This is expected to change. The cost of ISDN connections is falling. Professional services companies are starting to offer both the software technology to bandle multimedia content over networks and the support

Continued from previous page

work users. People who bought

modems three years ago to

achieve 28Kbit/s are now

upgrading to routers with the

The faster speed should be

sufficient to cope with most

tions currently available, but

users will probably find other

applications in the future

which will make even higher

demands on the technology.

Users working in places

where ISDN services are not

available are likely to feel

increasingly disadvantaged.

Germany and France are well

advanced in the adoption of

aim of reaching 128Kbit/s.

European variations

The growth of ISDN is crucial to the development of networked multimedla. The increased bandwidth of ISDN enables, for example, the possibility of reasonable quality dig-ital video transmission across networks. This will make videoconferencing - and other multimedia services - viable.

Ermie Radowick, director of the entertainment operations group at EDS, the US software company, has high hopes for videoconferencing over the

"It is definitely one of the hot applications of the future," he says. "At the moment, the limitation is on the bandwidth of the network. But, as the bandwidth increases, we will videoconferencing coming into its own."

EDS uses multimedia networking internally for distance learning. This allows it to cut training costs by broadcasting lectures over the network. Students can interact with the lecturer through a keypad. Although it says this bas

proved successful, EDS sees a big gap between this and full networked multimedia services. Further improvements in telecoms infrastructure are essential.

"There are still heavy limitations on the availability of the network and there is a major investment needed in many

ISDN, but the UK has not

moved as fast, and services in

other European countries vary

The security of remote

countries to switch from analogue to digital communications," says Hartmut Goetz.

He sees other problems with developing networked multimedia services: "There are issues over censorship, Intellectual property rights, crossborder flow of information and

"At the moment, there is no regulation on the Internet and no clear way that multimedia services will develop." Goetz

ome companies are taking the bull by the horns and building services on the emerging ISDN structure at the same time as offering Interpet services. The Signpost Multimedia Library, based in London, offers companies access to a broad range of multimedia clips - from high-resolution 'stock photography' to audio and video clips. It uses a range of ISDN services, including the Internet ISDN.

Richard Johnson, managing director of Signpost, says this was because be saw the need to provide a 'global' service

that the high profile of Internet-based communications has belped promote the advantages of online media: "Since we started Signpost we have seen that the online stuff bas become less of a mystery and

the Internet has helped. "Although it is still a blt shaky when it comes to delivering good multimedia products, a lot of people have gone online and got a taste for the

sort of thing they can get." However Grahame Poulter, chairman of On Demand Information (ODI), a networked multimedia specialist, is sceptical about using Internet-based communications for graphics and video transmission at the "Video on the Internet is

really not at all viable. People

have been carried away by the

bype and I think it is likely there will be a backlash. "I suppose it will come one day - but the serious questions that need to be asked are when and bow good the quality will

Installing an ISDN service is one way forward. Poulter says

from the start. He also thinks ISDN processing for a lower cost than they might think: At the simplest you can put in a basic system for about £1,200 now. This would include \$400 for the ISDN connection and about £750-£800 for an adapter board for a PC or a Macin-

ISDN lines come in two forms. The basic ISDN-2 service offers two channels, and the more expensive ISDN-30 offers 30 channels. ISDN channels can be combined to improve the throughput and

You can aggregate the channels so you can push stuff through much faster. This is called bandwidth on demand and means you can pick up as many channels up to 30 as you need. With video, for example, it might be faster and less expensive to use all of them, Poulter explains.

n addition to improving transmission speeds by using ISDN, graphics and video can be moved about more efficiently using data compression. There are well-established standards for data



ns: this PictureTel vide

images and MPEG for moving Until recently data compression was restricted to hardware - meaning you needed a special adapter board in the workstation to decode images and display them. But recent products also allow software decoding - reducing the cost

data compression standards promise to improve performance even further. "MPEG 4 is coming soon and

significantly. Moves to upgrade

that will push performance up. We also recommend dedicating a server computer to compression and decompression. You local area network and free up the workstation to do other work," says Poulter. Advances such as this will

belo bring multimedia to the desktop at a reasonable cost ter, higher capacity networks, open the door to multimedia

It will be some time before full business-orientated multimedia services such as videoconferencing become viable through standard Internet connections. But the network technology is advancing quickly and pioneering companies such as Signpost and ODI are buildine the foundation for the muitimedia services of the future.

Internet software touls: see report, page 15

Planning a global network . By Marcia MacLeod

# A complex route to customised solutions

E Connectivity Knowledge of variables in taxation, equipment imports and legal requirements in each country are among important issues Amsterdam, Paris, Frankfurt, notable exception being the rather than telecoms."

is becoming an increasingly attractive option for multinationals: not only is every office in every country linked together, but every office has the same software, with screens that look the same thanks to an identical graphical user-interfaces (GUIs). And any executive relocated to or visiting a different site can

access depends on good management and the adoption of suitable products, particularly access the company's system. A new specification called But buying such a network Radius (remote access dial-in is not easy; before the network user security), being developed is purchased, the company has by the Internet Engineering to decide which equipment will be most suitable for all pur-poses and in all countries. Task Force, may create an open standard for remote

It also has to decide a numaccess products. This would allow users to achieve a miniber of variables, such as what version of a packaged software mum level of security at a product should be used and lower price, irrespective from ... which manufacturer they buy. what language it should be in.

nstalling a global network If English is not understood throughout the organisation. someone has to ensure the correct language is used for keyboards, software and manuals - but if kit is produced for Shanghai in Chinese, which do we need for English-speaking There are service providers

who claim to be able to take care of the total supply and installation of a global network. Few can do so without sub-contracting most services. International Telecommunications Services (ITS) is one, thanks partly to its parent company, the Slta group, which runs a global telecoms network for airlines, and partly to its extensive network of

offices in 220 countries. ITS can supply a customer's worldwide computer solutions - from main server machine and PC workstations to network technology, cabling, and software. ITS will buy what it does not make, through partnership agreements with a number of suppliers, such as IBM, Lotus, Cisco (a network router vendor) and Isocor (an X.400 specialist), or incorporate equipment supplied by the cus-

Pre-sales advice But the real benefits of using

a company such as ITS is the knowledge of global computer and telecommunications requirements: the service starts with pre-sales advice from one of the company's larger offices in Maidenhead, New York, Singapore and, soon, Switzerland and Italy. "We use the pre-sales phase to work out all the parameters

before the sale," says Christian Fournier, administration and finance director, "so we can advise clients on the way we will customise their solution. "Does the customer understand, for example, that it is not possible to have a com-

throughout the world, due to restrictions on imports in some countries? Korea, for instance, protects its computer industry by forbidding the import of IT equipment if similar kit can be bought locally."

VAT recovery can be a hig part of an ITS contract. Most countries Impose VAT, one

US. But VAT can usually only be recovered locally. If a customer insists on all invoicing being done centrally, VAT will not be recoverable in any country except that where headquarters is based. If ITS can arrange for each local office to be involced, then that local

office will be able to reclaim VAT from its government. The difference can account for up pletely identical system to 25 per cent of the cost of a

Knowing the duty variances in each country is also important. "If telecoms equipment is imported into the US, for example, duty could be 5 to 7.5 per cent higher than for computer equipment," Fournier · to deal with local requirements explains, "so, if possible, we

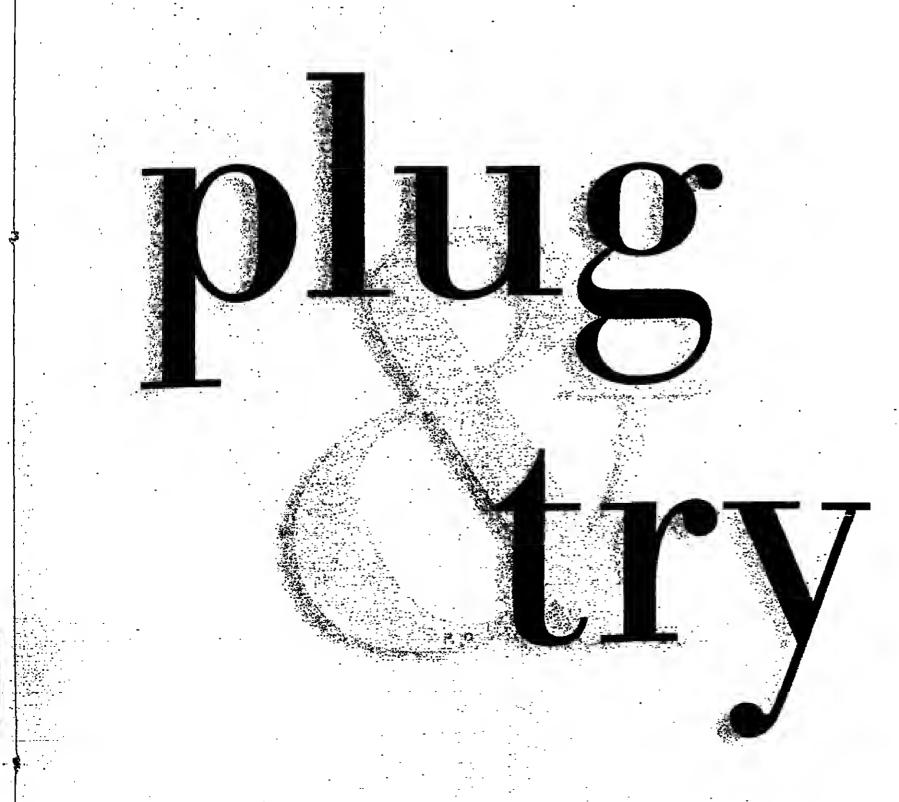
send equipment as computers

Legal requirements and other legislation, such as health and safety laws, must

also be taken into account. ITS ensures all of these fac-tors are covered through one of its 22 project managers and its PDK (Project Delivery Kitt. which sets out what has to be done, and how, in and for each country.

One project manager is assigned to a customer to facilltate provision and delivery of equipment worldwide, pulling everything together in the same way that a conductor manages an orchestra. The project manager, in turn, relies on regional project managers

Continued on next page



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Solutions for a small planet

Interview with Robert Madge • By Paul Taylor

# An unlikely entrepreneur

With the surge of interest in networking, the Madge group has been growing at an average of almost 80 per cent a year

cbairman and chief executive of Madge Networks, is an unlikely high technology entrepreceur. A quiet spoken, somewhat enig-matic Englishman, his background before he became ooe of Britain's few successful technology pioneers included spells as a ridiog school instructor, architectural journalist and chess computer

Today, he runs one of the most successful networking companies in the world and has become a passionate advocate for asynchronous transfer mode (ATM) technology which he believes will power the next generatioo of multimedia oetworks carrying voice, video and data to the desktop

"A'TM is likely to revolutionise the computer networking industry and the houndaries between computer and telecommunications networking." says Mr Madge.

Equally importantly, he believes that Madge has the strategy and 'product roadmap' to enable its customers, "to protact their iovestment in existing networks while ensuring a smooth and cost-effective transition to the ATM networks of the future".

However, when he founded Madge Networks in 1986 – using his Buckingbamshire farmyard stables as office space - he bad little technical experience of oetworking, But as technical director and general manager of Intelligent Software, a UK software house and silicon chip designer, and general manager of Enterprise Computer, a PC manufacturer, he did understand the industry

and chip design, in particular. This was an important asset since much of what Madge does involves designing lowcost silicon chips to switch data streams at high speed. His aim in starting Madge Networks was to accelerate the introduction of networking to link PCs together and build his company into the world number one in switched networks, overtaking established leaders such as Cisco and Bay Net-

obert Madge, founder, works. "Information is the raw material upon which organisations build their husiness." notes the group's latest annual How efficiently and cost-effectively ao organizatioo

shares information - hoth internally and externally directly impacts that compaoy's success. Computer netequivalent of a global delivery service - providing critical husiness information on a tional basis."

While many other companies spotted the opportunity for building networking equipment, most focused on Ethernet, the industry standard technology. What Robert Madge realised was that International Business Machines had created another market by introducing its own 'tokenring' network technology liked by corporate customers because of its robust quality. So be made two hets: one that IBM would decide that a small British networking company with no track record posed no threat, and second

nology changes rapidly, Madge Networks could improve upon IBM's own product offerings.

The gamble paid off. Madge is second only to IBM in terms of shipments of token-ring net-

process of change or moving so keeping track of all that level of activity is quite difficult," he

Three years ago, Madge Networks was floated on the Nasdaq exchange and now has a market capitalisation of nearly \$2bn, giving the group tha financial muscle to enter the mergers and acquisition business to fill out its product portfolio or acquire new technolo

in November, Madge bought Lannet, an Israeli oetworking company for \$300m in an allpaper deal which gives it access to switched high-speed Ethernet technology - seen as a stepping stone on Madge's corporate ATM roadmap.

As a result, Madge can now offer its corporate customers both switched token-ring and switched Ethernet which are both seen as staging posts on the way to ATM. Madge bought Lannet rather than try to develop its own Ethernet technology, mainly because of the time it would have taken,



The window of opportunity in the networking market, like many others in the IT world, is too short.

The acquisition of Lannet purchase of US-based Teleos Communications for \$165m. Teleos, a private company, fills another important gap in Madge'a product strategy and enables Madge to provide end-to-end switched networks for large corporations.

Robert Madge believes he has positioned the group to respond to customers' desires to move towards ATM, but without abandoning all of their investments in existing net-Madge Networks' customers

generally recognize Lan switching of token ring and the Ethernet as the fundamental huilding blocks necessary to efficiently into ATM.

Switching, says Mr Madge, provides the logical and evolutionary course towards fully switched networks - tackling shortcomings such as congetion and performance degredation in axisting networks, while providing a natural connection point into ATM.

Directions in ATM and multinedia: see reports, pages 9-11

■ Network costs • By Marcia MacLeod

# Always the unexpected

like moving house: if any-Lithing can go wrong, lt probably will, and the total cost somehow always adds up to more than the apparent sum of its parts.

For although a natwork may not suddenly display rising damp, it does hide a myriad of potentially expensive requirements of which no-one, least of all the board-member authorising the purchase, is likely to be aware.

Take the software, for instance cash outlay for purchasing llcences only amounts to 14 per cent of the overall lifetime cost of computing, according to Patricia Ryan, European general man-ager of WRQ, a software house specialising in network

connectivity products. "Ongoing support costs account for 45 per cent of the total," she says. "To maintain a large network environment. the customer has to run a help desk. If it decides to upgrade software and it has, say, 250 PCs, the cost in terms of manpower to upgrade those PCs and support the desktop user can run to as much as

125 man hours." WRQ believes that support per 'node' (PC) in a local area network (Lan) can reach \$1,200 (£784) - or \$300,000 for a

worst, they are a serious threat

are more difficult to assess,

congressional investigators

found. Businesses are reluctant

to report intrusions to law

enforcement anthorities "due

primarily to fear of the market-

place and of government",

according to a recent Senate

from customers - and the stock market - if they reveal

their vulnerabilities, the report

says. "Company insiders con-

firm to the staff that they have

experienced intrusions on a regular basis, but fear report-

ing them to the government or other agencies that might ulti-

mately report them into the

Industry surveys, however,

provide some measure of the problem. A group of leading US

computer security consultan-

cies, for example, identified

losses of \$800m worldwide last

year among clients in the banking and telecommunica-

tions industries, with half the

Companies fear a backlash

The risks of backer attacks

to national security.

staff report

nstalling a network is a lot 250-user network. By these figures, support costs will exceed the price of the desktop system within three years.

The desire to save money can itself lead to more expense. "When installing a network, people often look for the cheapest product for each purpose," Ryan points out. This includes the cheapest PC, the cheapest database, the cheapest modern, and so on.

"But by doing so, the user is pntting together a multiplevendor installation, which means more time and expertise - and therefore money must be spent on ensuring that all these different products from different vendors fit

#### Who pays?

"The interplay between products is important, but getting it right 'eats' time." And some of the most costly hitches come when something goes wrong: whose product is at fault? Which maintenance contract is relevant?

The cost in downtime and in fighting with the vendor to apportion ownership can be crippling," says Ryan.

Even the distribution and installation of software throughout the organisation can, according to a Gartner Group study, account for 17 per cent of total software

The rot can be contained: centralising purchases instead of letting each department, or even cach desktop user. decide what to buy, when and from whom will go a long way towards reducing expenditure and increasing efficiency. Not only will the problems of running multi-vendor systems be minimalised, hut volume discounts, including hlanket software licences, could become

Centralised purchases can also eliminate the problem of over buying" software - buying packages which the company already owns and for which extra licences can be obtained cheaply. The Personal Computer Asset Management institute in the US found that US companies, government and military organisations spent as much as \$2hn on software they already owned.

A range of software products exists to help central net-work control. WRQ's Reflections, for instance, enables the PC to emulate the bost terminal - to pretend it is a Dec. IBM. HP or other server - to enable every desktop user to access all corporate data from anywhere in the network.

Metwork security . By Louise Kehoe

# Big rise in hacker break-ins

Software tools used by hackers to detect vulnerabilities in computer systems are becoming more sophisticated and at the same time easier to use

Tetwork security is a rising concern for all Internet users, but in particular for husinesses that link their internal networks to the public Internet, making them more vulnerable to notential hacker break-ins. The costs of network security are also increasing. Sales of security software and equipment are growing at about 40 per cent a year and are expected to reach \$1bn by the end of the

This, however, is only the beginning because husinesses and organisations need the services of computer security professionals who can constantly monitor and update systems to close security loopholes as they are discovered.

By soma estimates, one computer on the Internet is broken into every 20 aeconds. US Defence Department computers containing non-classified hut sensitive data ware attacked approximately 250,000 times last year, according to the Defence Information Systems Agency, a Pentagon computer security force.

n an estimated 160,000 of these incidents, hackers Laucocoded in penetrating

"Hackers have stolen and destroyed sensitiva data and software. They have installed 'back doors' into computar systems which allow them to surreptitiously regain entry. They have crashed entire systems and networks " said Jack Brock, a director of the General Accounting Office, the investigative agency of the US Congress, in Senate testimony last month.

"At a minimum, these attacks are a multimillion-dol

Global

networks

Continued from previous page

and ensure someone is always available, regardless of time

All components of the net work are delivered to an ITS staging hub in the UK, France, Germany, Holland, New York or Singapore. ITS can then gather all equipment before it is sent to each site, and set up a simulated workstation to ensure tha system works before it is rolled out live.

Site installation may reveal problems which require local presenca and knowledge. Firstly, cabling has to ba installed before the rest of the equipment arrives, and this must be done according to local building regulations.

Requirements from local PTTs must be understood, as various countries have different rules as to what equipment can be connected to the telephone network. There may be labour laws requiring union staff to install cabling or other equipment and training may be required for the customer's

lt is this local knowledge the biggest of multinational network installations.

losses in the US. More than half of 250 US information security managers polled in February by the National Computer Security Association (NCSAl, a US lar nuisance to Defence. At industry group, said they had experienced Internet-related

> security hreaches in the past The Computer Emergency Response Team at Carnegie Mellon University in Pennsylvania, says that the number of computer security incidents is growing as fast as the number

'One computer on the Internet is broken into every 20 seconds'

of host computers on the Internet. Each year, CERT has seen a big rise in the number of security problems. in 1988 there were only six incidents reported to CERT. Last year

there were 2,412. Part of the problem is that the software tools used by hackers to detect vulnerahilities in computer systems are becoming more sophisticated and at the same time easier to use. Programs such as Satan

(Security Administrator Tool for Analysing Networks), which was distributed freely over the internet last year, can be used by individuals with very little expertise to break into a computer network.

Similarly, Rootkit is a series of free software tools developed by backers that allow an intruder to gain "root access to networks and claim the security status of a systems administrator. Someone with root access can read, alter or destroy any data on the net-

Even as backing tools become more effective, however, there are increasing numbers of companies with little expertise in computer security linking their systems to the

A survey by the Computer Security Institute, of San Francisco, found that more than 30 per cent of internet sites in its sample lacked a "firewall", a program designed to prevent intrusions. This is an invitation to trouble, computer secu-

MENS

rity experts warn. Even systems with firewalls can be hroken into, however, Security experts say that many of the firewall programs on the market offer little defence against a determined hacker.

Continued on facing page

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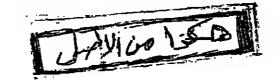
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Socurity Issues

### Rise in virus infections

Continued from facing page:

Moreover, to be effective, fire-walls must be regularly updated as hackers develop new methods of attack. Systems administrators must also keep pace with a constant stream of "upgrades" and "patches" issued by computer and software companies in response to the latest hacker

Computer viruses - rogue programs that can disable a computer or destroy data - are another aspect of the problem. Sometimes planted by backers, but more often introduced unwittingly into a computer network by a regular user, viruses are costing businesses billions of dollars in reduced productivity and direct losses.

Virus infections bave. increased almost ten-fold in corporate America over the past year, according to an NCSA study published earlier this year. NCSA estimates the costs of viruses to US companies and organisations will rise to between \$2bn and \$3bn this year, up from about \$1bn last

Another important element of network security is encryption. By encoding electronic mail - whether it be a private message, a purchase order or a credit card number - computer users can ensure that even if their files are stolen or intercepted they will not be read-

Currently, the US software industry is lobbying Congress to change export control laws that prevent the sale of strong encryption programs outside the US except in special cir-

Authentication systems that ensure messages or documents passed over a computer network are genuine and have been sent by the person or company that they purport to come from, are also expected to become a standard feature of data network communications. particularly in electronic com-

Even as new security systems are developed, however, backers keep finding new ways to circumvent them. Maintaining the security of weeks," says Mr Kurczij. "Time data networks appears likely to was of the essence, but everyremain a difficult and expen- | body was committed. Integrat-

Case study: European Bank for Reconstruction and Development

# Intranet transforms communications at international summit

The EBRD deploys an Intranet at its conference in Sofia, Bulgaria, writes Rod Newing

be European Bank for Reconstruction and Devalopment was founded in 1991 to help the east European and former Soviet Union countries in their transition to market economies. Each year it brings together industrialists, financiers, government, economic and finance ministers and journalists to meet and discuss issues which are particular relevant to private sector development in the region. The bank deployed an exten-

sive Intranet at this year s international summit in Sofia. We provided electronic mail to our delegates at last year's conference in St Petersburg, says George Kurczij, IT client services manager at the EBRD. "The facility was more successful than we ever imagined, so we wanted to expand it this year. However, as we had no funds we had to invite spon-

sors to come in with us." The Intranet was built as an international collaboration between aeveral sponsors, Microsoft provided Windows 95, Windows NT Server, Microsoft Exchange, their recently launched Internet Information Server, Internet Explorer browser and Microsoft Mail messaging system, as well as expertise and development

Wang/BISS undertook the development work, which integrated the Microsoft products with an Oracle database, the Novell network operating system, PCs from a Russian supplier and cabling supplied by a Bulgarian telecommunications company. "The whole system was designed and tested in ten sive problem for years to come. I ing the different multi-vendor tion on conference sessions,



none were generated on the system in three days

products proved to be quite a challenge. Another problem wa faced was that Microsoft'a Intranet products were still in the beta form, so there was little experience available on the most effective way to deploy

"We would love to have set the network up in advance, but there wasn't an opportunity. All the elements were thoroughly tested and then shipped to Bulgaria. We had five days to set up the network at the conference location."

### Easy to use

There were 40 terminals provided for conference delegates - "it felt a bit like the first Apollo moon shot. We tested all the elements and then trusted that the system would work first time," he adds.

There was no opportunity to train users, so the system had to be very easy to use. Delegates signed on with a bar-code on their badge and were greeted by an image of them-selves, scanned from their security photographs and retrieved from the Oracle database. The Intranet allowed delegates to browse for informa-

retrieve transcripts and translations, find out more about government schemes for funding, access the on-line confer enca oewspaper and seek potential partners and contact them through the integrated saging system.

"We had delegates queueing to use the system between sessions," recalls Mr Kurczij. "The most popular use was to allow participants to mail each other so that they could arrange to meet to pursue business opportunities. This is where the scanned images were so useful in allowing them to recognise each other.

The delegates generated 20,000 messages over the three days of the conference.

"An information system has become an established feature of our international summit." says Mr Kurczij. "The Intranet has given us a good start and has been a proof of concept of what can be done. We will develop it and enhance it next year. We will also build an Intranet in the Bank."

The e-mail address for George Kurczij, IT client services manager, European Bank for Reconstruction and Development, is: Marketolace alliance in IT services . By Nuala Moran

he US investment bank J P Morgan has created a new model for outsourcing by inducing competing suppliers to set up a coosortium to manage parts of its global IT infrastructure.

The terms of the seven-year, \$2bn contract, require the four suppliers not just to provide specified, discrete elements, but to work collaboratively, sharing their resources and technology, to deliver a seam-

less service. Apart from managing activities that represent about a spending, the bank says the deal will give it access to the technological expertise of all the partners to support new business and product develop-

In effect, J P Morgan will be "having its cake and eating it" getting companies that competed for the recent contract, and will compete again for the next - to suspend competitive instincts and pool resources on its behalf.

The parties to the deal, Computer Sciences Corporation (CSC), Andersen Consulting, AT&T Solutions and Bell Atlantic, bave set up the Pinnacle alliance with J P Morgan as the collaborative vehicle to run the contract. Pinnacla will manage the bank's data centres in New

York, London and Delaware, distributed computing operations, including desktop compoters and local area networks, and voice and data ceotres in New York, Delaware; London and Paris, and some corporate applications in the US and Europe. Jean-Michel Deligny, princi-

nal of the consultants Broadview Associates, says: "The way this deal is structured will enabla competitive tensions to be overcome. Although the collaborative element is being stressed, in fact responsibility for particu-lar parts of the infrastructure is defined by the contract."

The 900 employees (45 per cent of the bank's total IT staff) working in outsourced areas are transferring to the supplier companies, though JP Morgan did not reveal bow many will be allocated to each. The bank expects to cut its IT costs by 15 per cent over the life of the contract.

Peter Miller, co-head of cor The world headquarters of J P Morgan in New York

# A new model for outsourcing

Supplier companies suspend competitive instincts and pool resources to deliver 'a seamless service' for US bank

gan says: "We want world-class capability in all areas of technology. While we had some ourselves, it is not realistic to think we could be best in all areas. By the same tokeo, oo ooe supplier can meet the growing technology needs of our global business." J P Morgan threw down a challenge to the marketplace to come up with a joint bid.
"Our idea was to push suppliers' thinking to see if they

could come up with a best-ofbreed approach," says Mr John Mickel of CSC was responsible for bringing together the team members to bid for the Morgan contract. Mr Mickel, now the lead executive of Pinnacle, says "the alliance marks a oew approach in providing sophis-

services " Whatever the hype, or the aspirations, on the face of it

ticated technology support

cootractor agreement, with CSC as the lead company. All members of the Pinnacle Alliance will remain on the payroll of their original employ-

However, Mr Mickel claims it will oot be a case of each company delivering its part of the contract with CSC overseeing the whole. "Staff will work exclusively for the alliance, and will be formed into cross-company, multi-disciplinary teams. Everyone involved will have Pinnacle oo their cap badge," be says.

This perception is sbared with the other partners. Stephen Racciopo, a regional man-Anderseo Consulting says: "There are real and important differences between a prime and subcontract deal and Pinnacle. We have an agreed a set of principles, on how we oper-ate, and how we share people

and knowledge." It was not possible to make

binding, bot Mr Miller argues that, in any case, it was not necessary to do so - "there is a lot of peer pressure to behave well. In this alliance it will not be accepted behaviour for people to do finger-point-

> Executives from each of the suppliers will bave equal access to senior people in J P Morgan through the alliance's operatiog team. This team will be responsible for allocating resources and managing the activities of the alliance.

"The formation of a management team, made up of key executives from all the compa-nies, is a 'first' for a technology services agreement," claims Mr Mickel.

The companies believe that the equal standing they have in the operating team, along with the principles, will smooth away competitive friction. "We will share risks and rewards. We all recognise that the real value will come from us being willing to reach into our collective knowledge."

says Mr Racciopo. He accepts, bowever, that this deal does imply some loss of cootrol. "Obviously there are competitive implications of, say, sharing software tools, But we do have intellectual property rights, and we also look at any risk from the point of view that we are not leaders because we stand

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Whilst they have risen to J P Morgan's challenge to collaborate, the companies do not want this deal to be read as an acknowledgement that single suppliers cannot meet the outsourcing requirements of multinational companies.

"Not every client would want an alliance," says Mr Racciopo. "Collaborating on this deal does not affect our ability to deliver a full range of services to other custom-

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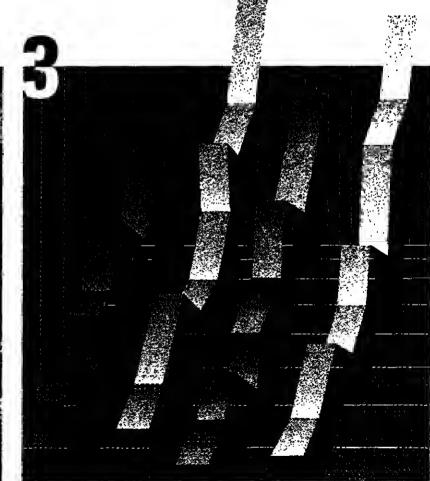
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# Siemens Nixdorf: User Centered Computing

■ Securities settlement: the arrival of Crest • By Nuala Moran

# Not a moment too soon

The ghost of Taurus, the UK's abandoned system for paperless share settlement, will be laid to rest later this month when the new Crest equity settlement system goes live - delivered on time, and to budget

rest, the electronic securities settlement system, will usher in the beginning-of-the-end for share certificates, and comes just over three years after the Board of the Stock Exchange announced it was scrapping its attempt to eradicate paper with the Taurus computer settlement system.

Beginning on July 15, securities will be progressively translated from paper records, into an electronic format, or 'dema-

On August 19, the first transactions will be settled in Crest. The transition will culminate in April 1997 when the Stock Exchange's Talisman settlement system is due to go out of service, 17 years after it first

For the UK securities industry, Crest arrives not a moment too soon: all of its international competitors already have paperless settle-ment systems - "the UK industry needs Crest to stay in froot," says Iain Saville, chief

#### The Transition Period

 Between July 15 this year and April 1997, registrars will face a huge data-input job as details of shareholdings are entered into Crest. A 'big bang' approach to beginning Crest operations was ruled out as too risky. But Crestco wanted to minimise the transition period to keep down the cost of running both Talisman and Crest - and to avoid the confusion for users of having to deal with both systems.

 In order to avoid building any links between Talisman and Crest, transition will take place security by security. During the transition each security will be settled either in Talisman or Crest, not both.

Once settlement has transferred to Crest for a particular stock, it cannot be settled through Talisman. This means all industry participants will have to be ready to use Crest from August 19.

 Although the institutions are keen to reap the cost savings of moving to paperless trading, until smaller shareholders can be weaned there will still be a large volume of paper in circulation.

 Crestco expects about 90 per cent by value of settlements to be electronic by the end of the transition period, but a much smaller percentage by volume. Dealings in any securities that have not made arrangements to settle in Crest by the time Talisman is switched off will have to settle through movements of paper between buyer and seller.

 For shareholders of equities handled by Crest who choose to stick to paper, share certificates and transfer forms will be moved from stockbrokers to registrars, with the movements co-ordinated with the electronic instructions. The haulage company TNT has established five centres in the UK and Ireland to provided a dedicated service to Crest.

pany set up by the Bank of England to establish and run the Crest system.

"Having an outdated settlement system is like letting the sewers rot: people cope, but efficiency decreases."

The previous attempt to introduce electronic settlement was overwhelmed by the technical and political imponderables, as the Stock Exchange struggled to accommodate all the requirements, of all its members, into the functional specification of Taurus.

The resulting complexity and "requirements creep" was the undoing of Taurus, and in March 1993 the project was binned. The City still needed a new settlement system, but it could not afford a Taurus 2. Responsibility for developing the system passed from the Stock Exchange to the Bank of England, which appointed a task force and gave it two mooths to come up with a new proposal.

The task force proposed a technically simpler architecture - a basic settlement engine with none of the frills that hobbled Taurus. But perhaps more significantly in winning acceptance, while Taurus would have forced sharehold. ers to give up their paper share certificates, Crest does not. Sharebolders who choose to keep their share certificates will be able to buy and sell shares in exactly the same way as they do today.

Although paper-backed transactions will be more expensive, Mr Saville said this is not deterrent pricing, but a reflection of the extra costs of handling paper.

Following approval of the task force proposal, the busi-ness requirements for Crest were finalised in May 1994 and the development of the software, (with the development process audited both by the Bank of England's internal auditors and Price Waterhouse) was completed by

In that time, Crestco grew from six employees of the Bank of England, working on the Bank's premises, to a staff of more than 120 with offices approved suppliers, Swift and

The Crest system runs on Tandem Himalaya computers. Network security is para-Rather than operating them. Crestco has outsourced care of mount and one of the key requirements was the ability to the machines to Hoskyns, part authenticate messages, so that of Cap Gemini Sogeti, the com-Crest is confident when transputer services company which ferring securities or creating employs 20,000 people in 15 payment instructions it is acting on valid instructions, European countries. Two dedicated computer cenissued by the legal owner of tres have been set up in Vauxthe securities.

Each user in Crest will access the system via a gateway, which will be, st a minimum, a personal computer. This will transfer data from the user to Crest, and support access to the system.

Mr Saville says the decision to outsource was "a question of focus". The Bank of England team at the core of Crest had experience of designing and huilding paperless settlement systems - "we decided early on to strip out things where we had less experience, and hand them over to suppliers wbo

The total cost of development and getting the syst running to full capacity will be under £30m. (Although, never officially acknowledged, the outlay on Taurus is said to have been £75m). Crest will cost £18m a year to

run and, if it makes a profit, users will get a rebate. As the Stock Exchange currently has an income of £55m a year from the Talisman sys-

up and running the networks to link in the users, Crestco has drawn up the specificatem, the securities industry will see its processing costs tions and designated two

#### **How Crest works**

The system can

transactions a

day. Network

hall, London and Greenford.

Middlesex. The system is

designed to settle up to 150,000

transactions a day, involving

scalable, sllowing extra pro-

cessing power to be added as

required. The Crest computer

will be available 99.5 per cent

of the time - in other words It

is allowed 10 hours downtime

Similarly, rather than setting

security is

up to 5m accounts.

The Himalaya proce

paramount

settle up to

150,000

 Crest will respond to electronic messages from members to transfer stock between accounts. It will authenticate the messages and compare the instructions input by the buyer and the seller - and match

 On settlement day, it will check the availability of stock and cash in the Crest members' accounts, and move the stock from the seller's account to the buyer's. The buying member's bank will be instructed to pay the seiling member's bank and will be unconditionally obliged to do

 Crest will notify the stock's registrar who will commit to register valid transfers within two hours of the electronic transfer within the system.

 The contents of each member's accounts on the register, and in Crest, will be a mirror image of each other.

op hats everywhere: the London Stock Exchange in 1880

But thet is not all: by moving to rolling settlement (where all transactions are settled a set number of days after they take place), and delivery versus payment, (where the shares and the cash are exchanged simultaneously). Crest will reduce risk, and more significantly, put the UK

Crest has been financed through the private sector, with 69 member-firms contributing £12m in equity, and a £17m borrowing facility.

industry on the same footing

as its international competi-

Despite putting np the money, the shareholders have no voting rights. Their views are represented by a steering committee, but full control of the project has remained with the Bank of England. This has enabled Crestco to decide on a functional specification and stick to it - unlike Taurus. where the Stock Exchange was running to keep up with the often-conflicting requirements of its members.

There have been criticisms that in avoiding the functional overload of Taurus, Crest has become too skimpy. Indeed,

there are some functions in the existing Talisman system. notably report generation, thet are not svailable on Crest. Instead, Crest will supply users with the raw data they need to do their own analysis.

Another criticism is that there are no links to the Seaq trading system. Rather than The total cost of

development and getting the system running to full capacity will be under £30m

trades being transmitted direct from Seaq for settlement, they must be input to Crest by the parties to the bargain.

While acknowledging that some users would like a single input, to a trading system, Mr Saville argues that only the legal owners, or their agents, should be able to move assets

However, details of all trans-

actions will be transmitted directly from Crest to the London Stock Exchange to allow it to polics the market and ensure that trades and settlement data marry up.

Sharcholders in Crestco will be able to dictate future enhancements, as control of the company will be handed over to them once Crest starts

Meanwhile, Mr Saville is "confident it will start on time" and that there will be "no alterations" to the transition timetable,

His confidence derives from the progressively more sophisticated trials that have been taking place over the past three months. These began on March 11 - just one hour behind schedule - with the 25 registrars that are responsible for maintaining company share registers. Following this were full scale trials involving all 260 participants in the system completed at the end of June, But Mr Saville is not crowing

about delivering a UK equities settlement system when the Stock Exchange failed to do so - "I don't regard it as some sort of triumph, just as a piece of good management," he says.

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## **I Issues and options** • By Nuala Moran

# Strategic IT development by the securities industry

Crest will put the industry on a new IT platform that can support wholesale changes in the way it operates

deliver the system st the centre of the UK's new paperless equities settlement system bas been matched by the efforts of the user-companies to link their computers to Crest.

Of two possible approaches: take what you have got and plug it in: or replace your entire settlement system with one built to be Crest-compliant, only the broker Hoare Govett has taken the latter option. in part, this is the failure of

Taurus casting a long shadow many companies spent heavily on developing systems to link into this earlier attempt at an all-electronic system, money which was wasted wben the Stock Exchange scrapped the project in March

"More important though, is the high overall cost of replacing existing settlement systems with new Crest-compliant ones," says Peter Little, managing director of the finan-clal software company, Braid

It is also enormously complex and involves every corner of the organisation - "there

he spotlight may be on must be a wholesale change of crestco, but its work to business practice and, for this reason, people are choosing to move existing systems to Crest. However, they see this as Stage 1 of a larger process," says Mr Little.

Braid bas installed Crest systems for 12 companies including registrars, custodians and brokers.

Gerard Kenny, of the software bouse TCAM Systems agrees: "Many Crest participants have selected tactical, relatively cheap, front-end solutions to connect their older settlement systems.

While opting for the less complicated option of keeping existing systems, some companies have invested in very sophisticated front-ends to handle interactions with Crest "this minimises the number of changes they need to make to their host computers, at the same time as allowing them to

get the maximum benefits from the introduction of Crest," says Mark Freed, sales manager of Citymax. The company has supplied its front-end software, called no behalf of 12 clients, and so has good insight into the trials which, it says, "went well".

Mr Freed expects the snccessful delivery of Crest to prompt a wave of investment in new settlement systsms. "Most of the industry is working on systems that are 10 to 15 years old, but they don't want to change them before Crest is bedded-in."

Mr Kenny agrees that s lot of companies have delayed upgrades until they have digested the move to Crest: The more important strategic decisions will be taken once Crest has become 'a known quantity' and extends the range of services currently being offered."

ne such issue will be deciding whether to amalgamate equities and gilts' processing systems when the Bank of England upgrades the Central Gilt Office to run on Crest software next year. Although the two systems will continue to be separate, it will be possible to access both through one gate-

This example highlights the fact that while the safe delivery of Crest may mark the end a new phase of strategic IT industry on a new IT platform that can support wholesale changes in the way it operates. Examples include links from Crest to other international settlement systems, or using Crest to handle other instru-

ments such as unit trusts. Iain Saville, chief executive of Crestco, says that enhancements to Crest would also allow the owners of the company to capitalise on their investment - "the cost of put-ting more business on to Crest is marginal, and so it would make senae to enlarge the scope of the instruments settled in Crest, and to enrich the range of facilities".

Mr Little agrees. "The lack of functionality in Crest has been an issue, but I believe it should be seen as positive. The industry now has a solid foundation; and can move on very rapidly and with confidence."

The challenge to the securities industry will be in agreeing how to develop Crest once it takes over control of Crestco from the Bank of England, later this year.

There is already a wish-list arm," says Mr Freed. "There must be someone strong at the drive forward, or it will all



The scene today: declers at James Capel in London

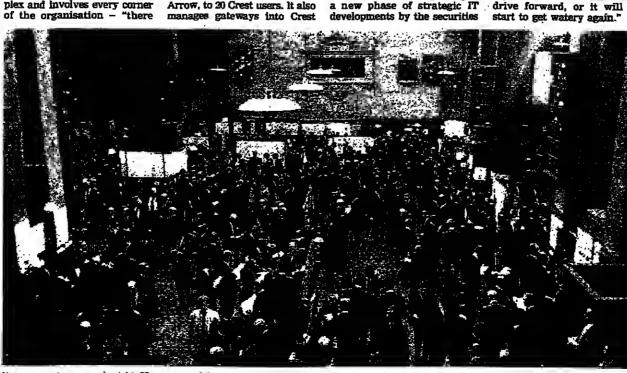


xious moments in 1967: deciens on the floor of the London

Crest and the private investor

The next issue of the EP's Quartery Review of Passing! Finance - to be published with the UK edition of the newspaper on July 19 - will look at the impact of thest for the private investor.

Creat will save chillors for the big institutional investors but it could make like more expensive for many private but it could make life more expensive for many private investors - particularly those who decide to being only indicates in theory, the move from places to set electronic settlement system should out coses not put them up. But there are a number of reasons with make private investors will find themselves worse off once them. is fully up and numing mark April



# Bulucational products • By Michael Dempsey High risks in the race to market

Publishers are discovering that the development of CD-Roms for the 'edutainment' market can be a costly business

the UK's First information Group, FIG, went to market in a flotation that raised £6m from institutional

tionen system

FIG was formed in October 1993 and only released its first CD-Rom in November. This was an interactive educational product aimed at guiding viewers through the origins and progress of the First World War. As a multimedia product it contains interviews with historians, 25 minutes of archive film and a series of storylines which the viewer can select. Priced at £29.98, it was the first of FIG's current catalogue of seven CDs.

Eugene Miskelly, joint chief executive of FIG, is predictably bullish about his company's future - "this market is starting to explode," he says. His confidence is based on tha proliferation of CD-Rom technology. The drive to run a CD-Rom, with the necessary sound and video cards, has only become a standard PC component over the last two years. Prior to that, a CD-Rom drive was an expensive add-on.

Optical Publishing Industry Assessment, a report from US group Infotech, talks of a huge market for its members' products, with multimedia home computers boosting the population of CD-Rom platforms to more than 400m worldwide by the year 2000. It follows that the number of programs sold to exploit this capability must run into billions of units.

"Edutainment", the awkward mouthful that characterises product lines from companies such as FIG. will account for 50 per cent of worldwide sales of consumer software by 2000, the OPIA says. These are the kind of statistics that could have every software house in Europe and North America rushing to launch titles - but this could be a costly mistake.

Tim Ashley, managing director of Wicked Web, an Internet dia facilities. "It was four years

n March 25 this year Web advertising, has studied the UK's First Informative rush to CD-Rom. He warms that while money can be made, the only areas likely to be safe are in established markets such as the serious educational sector that FIG has targetted.

"A lot of traditional publishers are not making money out of CD-Roms," says Ashley. He believes that when the development hudget, as high as £250,000 per titla, and packaging and distribution costs. accounting for 20 per cent of the price tag, are taken into account, it is too easy to lose money in the race to market with multimedia titles.

Miskelly is well aware that



Miskelly of First Information Groups bullish predictions

the nature of multimedia, coinbining voice and visual images with text, makes it totally different from book publishing. And he says Ashley's estimate of title development is on the low side: "We spend up to £500,000 on each title. It's a labour-intensive exercise - up to 20 people can be involved."

The very attraction of a multimedia product introduces extra costs: rights for pictures, text, film and music all have to be paid for.

Ashley recalls fitting out a PC built around the now-outdated 386 chip, with multimeconsultancy, specialising, in , ago. I put sound-and graphics



### **Directions**

£100 and the CD-Rom drive

Ashley produced his multi-

media at what was then a very

good price, because he was

willing to install the compo-

nents himself - "this exercise

still involved hours and hours

of endless hassle". Today that

capability is inherent in most

The home market for PCs -

often purchased for their edu-cational value - is also driving

CD-rom sales, says Pilar Cloud,

general manager of Broder-

bund Europe, part of the \$117m

US software group that created

Living Books to exploit the

Living Books subsequently

became a joint venture, divided

between Broderbund and Ran-

dom House, the largest general trade book publisher in the

English-speaking world. Ran-

dom House's contribution to

Living Books is its vast cata-

logue of titles that strika a

chord with parents who want

to introduce their children to

favoured authors via the latest

to misjudge multimedia pub-

lishing. Having access to titles

on the Random House list is

ona way to even the odds;

heading straight for the big-

multimedia units worldwide, a

very high proportion of those,

say 90 per cent, have been in

Costing hetween \$40-\$60,

these English language titles

are at the core of profits made

in this sector FIG knows that

international distribution is

important, but in this business

"international" means the US,

Ten per cent of the UK com-

pany's 110 staff work in Bos-ton, pushing its "edutainment"

line into a market that does

not need technical amend-

ments to the product. Accord-

ing to Miskelly, translating a

CD-Rom into another Euro-

We've sold more than 2m

gest market is another.

the US," says Cloud.

in particular.

Cloud agrees that it is easy

technology.

home multimedla market.

cost £400."

Multimedia in education and entertainment

pean language costs around £40,000. Putting "talking heads" on a PC screen has attracted the pohlic, but it means that a mere translation will not be sufficient for FIG's proposed French, Italian, Habrew and German editionsvoice-overs must be synchronised with lip movements when working in some languages.

#### **Economics**

Some companies are mastering the tricky economics of multimadia CDs. The \$199 Playstation, a system dedicated to playing the most advanced video games on CD, has been credited with transforming Sony's corporata loss of Y220.9bn for the year to April 1995 into a profit of Y138.2bn at April 1996.

RDS, the computer services giant, has launched Media Vault, a service for companies that need to archive footage of images from film and TV sources. The advanced database software involved means Media Vault can cost up to \$200,000. But the aim is to create an archive of thousands of hours of footage that can be scanned for retrieval in short

KDS knows there is money to be made here, but it is a relatively new area - "we are in the process of identifying the boundaries of this industry." says Reza Jafari, managing director for global entertaimment media at EDS.

Part of thet process will see players getting it wrong before tha dust settles. Investors should look carefully before leaping into multimedia adventures.

Computers in the classroom . By Tom Foremski

# Big debate on US initiative

US schools are at the centre of a drive to provide children with more computers -

arlier this year Bill Clin-ton, tha US president, and Al Gore, vice-president, took part in NetDay 96 which involved almost 18,000 volunteers installing network cabling in more than 5,000 of California's 13,000 schools. The organisers estimated the free labour was worth about \$115m.

The event was part of the Clinton administration's call for more computer technology in the classroom. And although NetDay added a lot of cables to schools, it did not add computers or provide teachers with skills for using them effectively in the classmom

The Clinton administration has socceeded in bringing attention to the need for computers in the classroom, but little is known about how effective computers are in teaching basic skills - raising the ques-tion of whether the exercise is simply throwing technology at the educational challenges facing US schools.

There is some evidence that students with access to computers do learn more effectively, but little on whether the computer skills they learn will halp them in their future studies or career choices. By the time today's young students leave school there will be better computer platforms and perhaps they will not need to be familiar with the vagaries of Microsoft and Apple operating systems.

Late last year, Clinton visited San Francisco and announced his Technology Literacy Challenge, urging businesses, industry and local government to "make a commitment of time and resources so that by the year 2000, every classroom in America will be connected to the Internet."

The problem, however, is that computer-use in US schools varies widely. The US Department of Education reports that the ratio of students to computers is now about 10 to one but there are



The Jeson project: students ground the world took part this year in a live, scientific underwater exploration in Florida Keys, in the US, via the first underwater world web site and 'telepresence' link, provided by EDS the IT services group, in pertnership with private industry

classrooms without any computers or with actiquated past seveo years in educational machines. For example, many schools still have large numbers of Apple II computers. which are five to 12-years old. And at least 50 per cent of the US's 2.5m classrooms do not have a phone line, let alone multiple phooe lines for Inter-

#### Response

Several large US corporations have listened to Clinton's call to become involved in modernising US schools with grants of money, equipment, services and teacher training. Pacific Bell, for example, is offering cheap Internet access to California's schools. Other ading US technology compa nies are involved in projects around the US, representing hundreds of millions of dollars in donations.

Some US corporations have realised they must go beyond simply pushing more computers into the classroom. US West Communications, a telestill hundreds of thousands of coms company, says it has

invested almost \$60m over the programs, donations of equipment and services. It recently launched its Concected Schools initiative, which provides teachers with Internet access, and, more importantly, training and support.

"Our research showed some

surprising findings about the usage of technology within schools. While computers are generally available, they are oot fully utilised at the teaching level for studeots or to train teachers," says Jim Smi-ley, vice-president at US West. "Connected Schools will enhance the use of technology as a teaching tool by giving teachers access to curriculum huilding materials, increasing communications with other teachers, providing the ability to exchange e-mail messages with subject-matter experts, and opening the opportunity to participate in electronic conferences and online training."

Computer vendors are also angling for larger shares of the school market. Apple has traditionally held the hon's share of but its lead is slipping as IBM PC-compatible vendors target this market. This competition is good naws for schools in terms of discounts and financ-

#### Weak point

Although initiatives such as the one proposed by the Clinton administration are belping to bring computer technology into the classroom, school administrations are a weak point in the process. For examof Education, which represents the largest school system in the US, has been making buge cuts in the number of staff who oversee the training of teachers in the use of computers.

And local school administrators are loath to spend funds oo compoters, even though some estimates put the fouryear cost of equipping every pupil with a Pentium PC ot

just \$1 a day per student. The issue of cost is most important. School funding is at an all-time low in many districts, where it is a challenge to obtain mooey for textbooks, let alooe high-tech items such as computers, modems and Internet access

One way to decrease school costs is with used computer equipment. There are several non-profit organisations in the US that offer corporation tax write-offs when companies docate older computers to schools. The organisations will refurbish the computers and send them into local schools.

New technologies could also help hy making computing more affordable. The network computer, for example, is a concept being widely promoted by Oracle, the database software company, and Sun Microsystems, the workstation manpfacturer. These two bave developed a specification for a network computer that could be sold for as little as \$500 and provide full internet access and the ability to run a variety of programs written in Sun's Java language.

Larry Ellison, head of Oracle, has spotted educational possibilities for the network computer and has teamed up

Continued on next page

Notebook

with docking

# Software Diner.



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enables Diners Club to migrate to dient/server while

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NB-500/I offers PCI Pentium power and a colour screen. And its modular design means that desoite its small size and light weight, users benefit from a wide range of alternative configurations, including an optional CD-ROM drive This Notebook has been designed to beat the best in the world, matching the versatility and processing speed of much bigger and heavier machines. Its Pentium processing power, multimedia capabilities. upgradeability and performance certainly puts the NB-500/I in a class of its own. NB-575/1 75MHz Pentium Processor 8MB RAM (expandable to 40MB) 10.4" Dual Scan colour screen

540MB removable hard disk drive NiMH battery and AC adaptor 16-bit SoundBlaster audio, audio ports and built in speake 2 x PCMCIA Type II slots, or 1 x PCMCIA Type III slot Compact and light - 297 x 228 x 50mm and 2.9kg Windows 95 (or DOS 6.22 & Windows for Workgroups 3.11) pre-loaded £2\_109.13 inc VAT (£1,795.00 exc VAT)

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£205.22 per quarter inc VAT For NB-5120/1 £318.97 per quarter inc VAT Other specifications and finance available



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■ The Information Society • By George Black

# Complications delay birth

Market access, regulation, and intellectual property rights are among the problems that governments will have to resolve before the new world dawns

ear and a half after the Group of Seven ministers' first conference in Brussels on the "information society", that brave new world still looks a fair way off.

When It arrives, multimedia technology promises to deliver to the education and entertainment sectors many useful new systems, ranging from tuition by videoconference to online

Last year's meeting in Brussels of ministers of the group of seven leading industrial nations aimed to assist in the birth of the information society and the superhighway on which it will depend.

To create such a society, governments have to sort out a number of extremely difficult issues. The G7 Industrialists' Forum, linked to the Brussels conference and comprising around 40 leading companies involved in information tecbnology, has published an

### **US** initiative

Continued from previous page:

with Michael Milken, the former junk bond king to form Edocational Technologiea, which will develop and market

network computers to schools. The huge growth of the Internet represents a great educational resource. For example, the Jason project (see previous page) allows students from around the world to follow the underwater explorations of a robotic submarine, Logging on to the Jason web site (http://www.eds.com/jasonjecm10000 .htm), students can see videos of the underwater explorations, follow the work of science researchers

and ask questions, The Internet could potentially bring the world's best teachers to students and lower educational costs. And it underlines the fact that it is the application that is important, not the focus on technolagenda for governments to

tackle. It covers the liberalisation of telecoms to introduce more down, the opening of markets and an increase of free trade, and the establishment of crossmedia intellectual property

The 1994 report by European Industry Commissioner Martin Bangemann also listed encouragement of investment, open access to networks and data protection as key topics. To these many industry leaders would probably want to add dats encryption and media

Among the main concerns of European governments is to ensure that the new world of multimedia is not totally controlled by US companies. They want to ensure that it yields a fair proportion of products based on European culture and European languages. They see an alarming precedent in the film industry, to which multi-

media is closely related. The G7's Brussels conference was followed by another in Sonth Africa in May, extending the scope of the debate from the industrialised to the developing nations.

Meanwhile, the EU has Isunched a number of multimedia programmes and the Organisation for Economic Co-operation and Development (OECD) has also debated the

So there is no lack of high-level talk. The official bodies have also put in motion a number of practical initiatives, from developing electronic libraries and museums to setting up a European edncation software taskforce.

Members of the European Commission are keen to establisb an 'Open University for Industry, the Commission has nailed its colours to this mast by designating 1996 the 'Year of Lifelong Learning'. One of its main aims is to draw attention to the inadequacy of existing educational facilities for equipping people to cope with the fluid job market of the

Mr George Hall, head of corporate affairs at computer manufacturer ICL, says the EU's programme has been very positive. "But," he adds, "there are a lot of conflicting interests and there is no easy solution to the problems. There is still a very large amount of work to

Following the lead of the G7 Brussels conference, the UK government in February allocated around £35m to an 'information society initiative, over

Under this initiative, a multimedia demonstrator competition was launched by the Department of Trada and Industry, with £3m prize money offered to the projects which best demonstrate the business advantages of multi-

media products. The DTI has also produced a set of multimedia case studies and plans to offer a number of creativity awards aimed at stimulating the development of digital products by businesses

hrough initiatives such as these, the harriers between sectors such as publishing, computing and broadcasting have begun to be

But bringing together regulated industries such as telecommunications and broadcasting with unregulated ones such as computing and publishing is bound to cause some

Within the telecoms industry there are buge differences between countries. The US has meanwhile leapt ahead in deregulation with its recent lecommunications bill. EU governments bave been

directed by the European Commission to deregulate their telecom markets by January 1988. This requirement looks likely to be met by all memberstates, though some with reluctance, opening the door to more competition and lower For the entertainment and

education markets, maintaining the right balance between the national carriers and the new entrants to telecommunications such as the cable companies is also important. Partly as a result of lagging lation, Europe has fallen

the multimedia industry. It has perhaps only a coupla of years in which to catch up before the US starts to take the lion's share of the profits. The European Commission struggling to shift the Union

behind the US in developing

into a stronger position, has issued a consultative document on property rights and is at present studying a mass of comments from interested par-Complex arguments are

being conducted about the usefulness of software patents and the collection of royalties. They must he resolved as Mr Philip Virgo, planning

executive of Eurim, a group which monitors Europe's infor mation technology policies. says that Europe needs to acive the property rights question within the next 18 months "otherwise the industry will migrate to where a legal frame work exists, that is in the US,"

he says. Already much of the datsbase publishing husiness has migrated to a more comfortable climate, on US host

Governments on both sides of the Atlantic have expressed their concern that the benefits of multimedia should be widely spread and not divide societies even more sharply into infor-mation haves and have-nots. How to ensure this happens is another tough proble

A blueprint may be the Sonth Bristol Learning Network, a project which was designed to introduce the latest IT into an urban poor community previously deprived of

Some 6,000 people have been trained through that project. around 80 multimedia roadshows have been delivered to local organisations and the network is being cloned in several others places around the UK. It is planned to start a similar scheme in Brussels and there is interest in the idea from all over the world.

The project indicates a possibility of building the sort of superhighway that US Vice President Al Gore has championed, driven by demand rather than supply

Multimedia applications . By Nuala Moran

# Wired-up home of the future

Exhibition brings together new systems for education, work, shopping and entertainment

ultimena - unity to mix and manipulate sound, words ultimedia - the abiland pictures, and pump them down a single 'pipe' - promises profound change. Services already on offer, such as financial services transaction and information kiosks, shopping on the Internet, or telephony over TV cable networks, provide unconnected clues to the impact which multimedia systems will have on the way

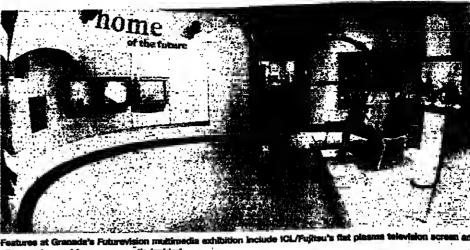
It is now possible to gain a view of what life will be like when all the dots are joined up' at Futurevision, an exhibition of a multimedia future set up in the north of England by Granada Television at its studios in Manchester.

The exhibition, in celebration of the company's first 40 years, looks forward to the year 2056. Despite being opened by the famed futurist Arthur C Clarke, Futurevision is not about predicting future technology. All the technology and services on show - flat screen televisions, virtual pets, home shopping, exist now. What the exhibition reveals is what life will be like when these technologies are integrated, and commonplace.

"This isn't just a warehouse full of technology. It's designed to show ordinary people how multimedia will transform everyday activities such as shopping, learning and walking the dog." aays David Stoves, business development manager for multimedia services at ICL, one of the main sponsors of the exhibition. Visitors to Futurevision can

'virtually' try on clothes, relax in an 'electronically smart' home, savour the lovs of interactive TV and anticipate the demise of classrooms as we know them today.

The 'virtual classroom' at Futurevision shows how, through the power of multimedia, students will be taught by specialists around the globe, who will not just be lecturing



by satellite, but also setting project work and answering

Classrooms will be linked, allowing students in different schools and countries to compare notes and work collaboratively. The virtual classroom shows how adults will be able to use technology to keep their skills up to date, and to learn new ones. The Futurevision piano has a small screen inset above the music stand from which an electronic tutor will supervise as you practise your

As well as greater flexibility in learning, the reach of multimedia will increase flexibility on the 'where and when' of work. The mobile workplace demonstrates how multimedia will enable people to have exactly the same computing and communication facilities on the move as they do at a

In the Electronic High Street, customised fashion shows give shoppers a view of how they will look in the articles they choose, removing the drawback of home clothes shopping. Cross-store price comparisons are also available.

Naturally, all payments are electronic, and if funds are short, the bank manager can be charmed via a video conference link.

As the creation of a television company, Futurevision naturally emphasises the effects that multimedia tecbnology will have on broadcasting. Visitors can become participants in the television show Telly Addicts, direct how they would like the plot to thicken in a crime saga of their choice, and sell shares and buy jeans via the wide, flat, high definition TV screen hanging like a picture, over the mantelpiece.

Initially, all this interaction is via a keyboard or a touch screen," says Mr Stoves. "But the aim is to update the exhibition as the technology becomes

available, and it will not be long before most of this equip ment will respond to voice

Above all. Futurevision illus trates the way in which multimedia services will turn the home into fully wired-up sites for education, work, shopping and entertainment. It has also given participants food for thought on the joint business

Multimedia research - By George Black

# Pioneer projects

Among UK projects pioneering the introduction of multimedia to the world of education and entertainment is the Cambridge Cable interactive television trial. Meanwhile, a British Telecom trial is seeking to establish the potential market for multimedia services, based on interactive television,

The Cambridge trial, which gan in 1994 and has no fixed date of conclusion, is being run by a consortium involving Cambridge Cable, ICL and Online Media (owned by Olivetti, through Acorn Com-

It is only one of a number of hig multimedia trials going on around the world, but is probably unique among them in its sharp focus on the convergence of technologies.

It uses fibre optic cables to the kerb and coaxial copper

cable from there to the user. A two megabits per second ATM (asynchronous transfer mode) link enables images to be

received in a few seconds.

A group of 90 homes, ten schools and three businesses is being used to test what types of new multimedia aervices may he made available by cable. The trial's services manager, Alan Clarke, says the user group is not a basis for statistical conclusions hut is sufficient to bounce ideas and techniques off".

Participants have a choice of ames, films, BBC and Open University TV and radio programmes, news and documentaries, as well as a number of retail and business services.

All of these can be accessed through a set-top box like a small video recorder. Later, the Continued on facing page

**FINANCIAL TIMES** 

Newsleuers & Management Reports

# What real opportunities does the Internet present for your company? Cut through the hype with incisive analysis of the key issues and hard facts.....



Managing the supply chain by Mike Hendry Tick Box Although only 2% of all retailers use electronic data interchange (EDI) they currently account for around 75% of all retail turnover in the sector. The number of users is forecast to treble by the year 2000. This report pinpoints the issues that need to be resolved by new users, service providers and the EDI community as a whole including standards, technology, contracts and security - illustrating how EDI can

bring competitive advantage. December 1995: £275 UK; £295 Europe; £305/US\$488 ROW

IT and the Future of Retail FORTHCOMING
The application of the The application of leading edge technology 

Can high street stores develop effectively in response to emerging retail environments? How can retailers implement new technologies to gain competitive advantage?

This report provides you with a realistic guide to the application of leading edge information and communications technologies in retail. Building on the best selling Impact of IT in Retail, it considers the costs, timescales and management issues ansing from new media, in-store developments, new payment systems and leveraging information for competitive advantage.

August 1996: £320/US\$480

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# Retailing on the Internet FORTHCOMING

Future prospects for on-line commerce by Christopher Field Tick Box

Millions of consumers already have access to the Internet worldwide, with the numbers of users doubling year on year. The enormous opportunities this presents has encouraged thousands of retailers to rush to establish their presence on the Internet but what are the real commercial implications for your company?

Contents include:

- SWOT analysis
- Payment systems and security implications
- Setting up your website
- Cable, satellite and competing retail methods
- Extensive statistical support
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Backed by the views of leading analysts and consultants, this report enables you to assess the extent and validity of your commitment to electronic commerce. July 1996: £320/US\$480

# Supply Chain Management FORTHCOMING



Best practice and the impact of new partnerships 

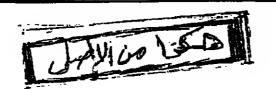
How can retailers achieve greater cost efficiencies to enable greater expenditure on customer services initiatives? The supply chain provides many opportunities for retailers to reduce costs to support

enhanced customer services and lower prices. As retailers are looking beyond traditional logistics boundaries into the domain of the manufacturer, manufacturers are looking at raw materials suppliers in the same way. New initiatives such as Efficient Consumer Response (ECR) are further blurring the divisions between retailers' and manufacturers' supply chains. This new report details the latest developments and discusses the critical issues that any company must evaluate when redefining supply chain dynamics, drawing directly from the experiences of industry leaders.

Case studies include:

Profiles include:

- Tesco
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- White Arrow
- Wickes Ltd
- Transport Development Group



# Key to a high-speed future

While ATM offers rapid transmission for the multimedia networks of tomorrow, its application has met with delay

The IT industry has been getting excited about ATM because it can send data, voice and video together at very high speed.

When ATM was first demonstrated in 1993, information was transmitted at 45m bits a second. Today, the IT industry has pinned its hopes on ATM (Asynchronous Transfer Mode) because it by far outstrips X.25 and Frame Relay in wide area networks, as well as Ethernet and Token Ring in local area networks.

lts atandard apeed is 155 megabits per second and its potential exceeds two gigabits per second. Large amounts of money are therefore heing invested in ATM pilot projects

across the world. Networks will need ATM because most of them, from those of the international telecommunications carriers to those within small companies, are under severe pressure. They are short of bandwidth for their fast-growing numbers of users and ever more com-

The solution is a fast packet switching technology which offers bandwidth on demand. ATM is best able to deliver that, but it is still an emerging, not an established, technology.

This year was widely expected to be the one in which it would reach maturity and capture a large share of the networking market, but analysts have been revising their over-enthusiastic forecasts.

☐ The US market analyst Forrester Research now thinks that ATM will remain a niche technology in Lans for as much as ten years, during which Fast Ethernet and Ethernet Switching will remain the norm.

A survey by ATM equipment supplier Olivetti found many prospective users felt the lack of standards and of skills were serious obstacles to adop-

□ A study last year by the Ovum consultancy found that telecom carriers were delaying implementation hecause they were worried about losing revenue from existing narrow

recently emerged alternatives of Fast Ethernet and Ethernet Switching have proved more

capable than expected and are delaying the move to ATM. Past Ethernet, at 100 Mbps ten times faster than Ethernet, can unlike ATM be installed without greatly changing the infrastructure. Ethernet Switching widens the Ethernet

channel so that more informa-

tion can be delivered at the ATM is recognised by Lan systems suppliers as the best way for the long term, when those interim solutions become exhausted. Makers of Lan equipment such as routers, hubs and bridges are steadily incorporating more ATM capability into their new products. But at present the Lan market

is still at the "early adopter"

#### Visualisation

There are few applications as yet which require the power of ATM," says Mr Mike Pilbeam, research director for network designer Cray Communications. "People setting np pilot projects find it hard to think of useful things that ATM could do."

ATM is ideal to support multimedia applications which must have guaranteed commuvideoconferencing.

Mr Mark Phelan, European marketing manager for ATM equipment eupplier Cascade Communications, notes: "It is applications, which require visualisation, which will drive ATM into the Lan, but there are not many of these at pres-

Tha ATM Forum, which has won general admiration for its pro-active approach, has been driving standardisation as quickly as possible and is spawning new acronyms at an

But, with a membership of around 500 companies, it is running into difficulties, both technical and political. Considering that ISDN (Integrated Services Digital Net-

work) took well over 20 years to achieve success as a public telecoms system, it is not surprising that ATM has fallen slightly behind its promoters' hopes. It is, after all, only 16

Mr Paul Trowbridge, European product marketing manager for Lan equipment vendor Bay Networks, says that standards created by the Forum in to stimulate the adoption of ATM as a Lan backbone. He sees the establishment of

a Lan emulation standard as especially significant. The Forum's Uaer Network Interface (UNI) is gaining acceptance. The next steps will be to lay down the Multi-Protocol Over ATM (MPOA) and the Private Network to Natwork Interface (PNNI) standards.

#### Forecast

concedes that, in spite of this ancouraging progress, ATM will probably not reach the deaktop for five to seven years. In wide area natworks (Wans), the prospects for ATM are similar: good, but it will take time. Competition for the offer services based on it. They are investing in it in the hope

However, Mr Trowbridge

established carriers from new entrants such as cable operators is increasing and is forcing them to look at ATM as a competitive weapon.

"The carriers are no longer an obstacle to the spread of ATM," says Mr Ken Davison, vice-president of marketing for Newbridge Networks, an ATM equipment supplier to the car-

European carriers, led by Telecom Finland and in the UK Energis, are starting to deploy ATM in their networks and

vehicle for delivering services than X.25 or Frame Relay. Some of them plan to move their current services including those based on the fast packet SMDS (switched multimegabit data service) and Frame Relay systems, on to an

of saving money in the long

term, as it should be a cheaper

"The carriers can use ATM to consolidate their services on to a single infrastructure," says Mr Mark Phelan of Cas-

ATM core.

Cray points out, "no-one ha cade. However, in the US, carriers are mainly adopting ATM for new services rather than for transferring existing services on to it.

The current wave of mergers and alliances among the carriers is likely to speed up the adoption of ATM, according to Mr Davison of Newbridge. He says they will all need ATM in order to be able to offer faster and more powerful international networks. But at present the carriers are still proceeding rather cautiously with their

yet built a large enough ATM network to be sure it works. There is still a lot to be learnt". The massiva growth of the Internet could prove a crucial

factor in accelerating the spread of ATM. Internet service providers are now in the process of installing ATM switches to cope with the fast-rising vol-

ume of traffic. "The Internet is potentially the 'killer application' of ATM that people have been looking experiments. As Mr Pilbeam of for," says Mr Phelan.

## Business application . By George Black

# Scottish Power plans a large ATM network

The company hopes it will improve the response to customer inquiries by having a mass of information available at the operators' fingertips

Scottish Power is building one local area networks using conof the largest ATM networks in the UK at its Glasgow head

The company is the sole supplier of gas and electricity to southern Scotland and, through its recent acquisition of Manweb, now an energy supplier to Merseyside, Cheshire and North Wales. It is also a new entrant into telecommu-

nications. It is installing an ATM network for 1,700 users in three buildings at a cost of around film, based on switching equipment from 3Com.

The new network is part of a move from ICL and IBM mainframes to a client/server, distributed systems environment. which is being undertaken to help the husiness cope with rapid change and expansion.

### Inquiries

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In April, a new customer service centre in Glasgow started to take ovar handling telephone inquiries from 1.7m cus-

This service involves highly graphical applications. Helpdesk operators can call down to their computar screens images of gas and electricity. meters, credit cards or domestic appliances such as washing machines to help them deal with customers inquiries. Later this year they will also have access to images of cus-

tomers' correspondence. It was realised that these new aystems would demand huge communications power and compel replacement of ventional Ethernet structure.

The company therefore invited suppliers to bid for either an ATM or an FDDI (fibre distributed data interface) solution. FDDI is a token ring structure network running at 100 MBps, compared to ATM's 155 MBps. Mr Justin Leese, the company's network manager, says they knew that ATM was more powerful than FDDI but were not sure it was surprised that around a third of the 24 bidders insisted it was mature enough: .

The solution chosen was an ATM-based bid by Workplace Technologies, a service company formed by a management buyout from ICL, the computer

Because of the risk, Scottish Power insisted that the equipment should all come from a single manufacturer to minimise compatibility problems.

It also laid down that there should be a fallback FDDI option, paid for hy the supplier, in case ATM failed to meet the requirement.

The ATM switches will provide bandwidth-on-demand, or variable amounts of connection according to the volume of calls. Scottish Power hopes the new network will enhance its response to customer inquiries by having a mass of information available at the operators' fingertips. The network is designed to be easily expanda-

German researchers move to ATM: see report, next page

# Several Moves Ahead



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several moves ahead. Ricoh - your masterstroke.

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# Services on trial

Continued from facing pages

trial may adopt keyboards with infra-red communications to the television.

Services for users are constantly changing: in April they were offered accesa to the internet through their TV sets. Mr Clarke says the project managers increasingly regard the Internet, its subset the World Wide Web and interactive television as "parts of the same continuum".

Users are being offered Web browser tools as a front-end to interactive television to enable them to download whatever Entertainment or information they chouse. They are also being offered links between teletext pages and the Web at the touch of a button.

NOP Research Group bas been recruited to the venture to assess the users' attirudes to the services available. Mr Clarke says it is very difficult to predict from the trial what sort of education and entertainment services will be viable because the technology is changing so fast. But he is conlident that the experiment will help the participant companies to position themselves more effectively in the emerging

Another significant trial being run by BT - provides several contrasts. It also uses ATM transmission but adopts the already installed twistedpair copper phone lines. It is delivering services to users at two megabits a second via the ADSL (asymmetric digital subscriber loop) transmission system, which it says has proved "very robust".

BT reckons that its trial has offered the widest range of services of any such project worldwide. Around 2,000 homes and eight schools in Colchester and Ipswich, chosen to provide a representative sample, have been involved in the project, which was scheduled to finish at the end of In this trial, the services

have remained constant, the technology having been tested in 1994, users have been charged and prices have varied to assess their willingness to pay. BT will be studying the results this summer before making a decision on what services may be commercially viable Analysts do not expect the general roll-out of these types of services to begin until at least 1998 and it will probably not become a substantial market until after 2000.

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■ World IT Congress • Report from Geoffrey Naim in Bilboa, Spain

# IT companies in mid-life crisis

More casualties are likely as traditional IT companies battle against the new denizens of cyberspace

o today's IT companies have a future? It is not a question the industry often considers, but this year's IT World Congress, held last month in Bilbao, Spain, caught many companies in uncharacteristically pensive mood. market research firm input. estimates 3 per cent of large banks currently do husiness on

The internet is largely to blame for this mid-life crisis. Two years ago, when the last World Congress was held, the Net was an exciting new business opportunity. Today, it poses a real threat to many companies. Established software businesses see young upstarts achieve overnight success by offering free software on the Net. The traditional broad-based IT vendors fear many of their existing products and services will scon become obsolete.

Telecommunications companies could lose large chunks of their lucrative long distance voice traffic to internet phone technology. For Nicholas Negroponte, IT gura and directute of Technology's Media Lab, this is just the beginning and the financial services sector could be next to succumb.

"In the next six months, we will see a lot more attention being paid to digital money, he told 1,200 delegates during his keynote speech at the Con-

Topics in the next FT-IT Review

issue will include the following main themes:

□ IT Directions: Systems Support and Security.

For more details of the September and October

reviews, see details of the Fax-U-Back service, on page

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two of this current Issue.

There will be no IT Review in August, but the September 4

gress. In two to three years, he predicts, huge amounts of money could be circulating on the Net that have no connection with governments' monetary systems. Peter Cunningham, president of the US

rently very passive, socb as supplying information on products." he said. By 2000, be predicts more tban 90 per cent of the big banks will be using the Net for

the Net. But their use is cur-

ose Fonoliosa, general manager of BBV, one of Spain's largest and most innovative banks, does not see retail banks disappearing overnight, although he takes

the threat seriously. "The problem is not the Internet, but the capacity of banks to understand their own customers. In most countries, going to the bank is like going to the dentist." he says.

Fonollosa believes conventional bricks-and-mortar banks can compete with virtual banking by using IT to improve customer service and reduce the costs of their branch networks. In ten years, BBV has cut the number of staff in back office

functions from 25 per cent to 6 per cent of its workforce. That banks still have a future was welcome news for many in the Congress audience.

IT companies dapend beavily on the financial sector and encouraging banks to spend ever more money in a seem-ingly endless process of techfits of this investment are often elusive - one anonymous IT director of a bank has called the extensive computerisation of banks in the 1970s and 1980s the biggest hank robbery of

Even information technologies companies admit that their users in the financial sector have not been well-served We commonly see that users are extremely frustrated with their IT investments," says Robert Gogel, vice president of the financial services division of Siemens Nixdorf.

The latest technology to disappoint is client/server computing: five years ago, banks and other users of mainframe computers were encouraged to scrap the "big iron" and downsize to decentralised systems hased on the client/server architecture which, suppliers claimed, made applications cbeaper and quicker to

The reality is somewhat different, as Rosemary O'Mahoney, managing partner of Andersen Consulting, told delegates at a Congress session dedicated to this theme.

"Early expectations that client/server applications would be cheaper have turned out to not be well founded," she said.

The reason lies in the high cost of creating a support infrastructure to service the myriad machines and applications scattered through an organisation. Data warehousing has replaced client/server computing as the industry's favourite buzz phrase and it featured heavily in the presentations of eading vendors.

Jose Luis Solla, chairman of NCR for Europe, Middle East and Africa, presented data warehousing as a technology



and the use of digital money

that "enables a paradigm shift. to the age of the consumer". net that grabbed most attention at the Congress and, in particular, its graphical section, the World Wide Web, which levels the IT industry's playing field by allowing any company, large or small, to mount a "shop window" and

compete in cyberspace. Mike Zisman, executive vice president and chief executive of Lotus Development, said: "There has been nothing in the past 40 years that has transformed as much as the Web."

Lotus knows only too well about the Internet threat: in 1995, the company faced technical obsolescence and commercial oblivion as it suddenly realised it could not afford the cost of converting its proprietary Notes product to work over the Net. To fund the new development programme, It agreed to be acquired by IBM.

At the World IT Congress, Nicholas Negroponte sald many IT companies had not yet grasped the revolutionary nature of the Internet because their middle-aged leaders are "less Net-aware than the average American 13-year-old".

While these "digital homeless" remain in charge, more casualties are likely as tradithooal IT companies hattle against the new denizens of cyberspace.

## ■ Profile: European Commissioner Martin Bangemann • By Geoffrey Nam Pace-setter on the infobahn

The IT industry is often accused by its customers of promising much and delivering little. Martin Bangemann's job, as the European Commissioner for Information Technology, is to ensure that Europe is not similarly short-changed by the digital revolution

Building an information society to one of the greatest challenges facing Europe in the next few years, according to Martin ann, but the transition will not be easy and the scale and speed of change threaten to catch many unprepared.

"IT is bringing about a new industrial revolution and we want to make people aware not but also give them a sense of urgency," he says. The increas-ing globalisation of jobs and industries means Europe must act quickly to restructure its declining industries and improve competitiveness in IT and services

"A culture that isolates itself from other countries will be dead in a short time. Jobs will get lost, but these jobs are already unproductive, and soon they will be replaced by new jobs," he says.

Bangemann has been a mem ber of the European Commis slon since 1989; and since 1993 he has looked after industrial affairs and 'DGXIII', the EC directorate that embraces telecommunications, the information market and research

He is perhaps best known for the 1994 Bangemann report. which attempts to explain where Europe has gone wrong in IT. The report rejects using public money to fund the digital revolution and instead puts its falth firmly in market forces, it calls for faster telecomms deregulation and proposes specific projects to stimulate demand and give the information society critical

The report became a refer-

ence point for the industry and spawned a bost of similar initiatives, most notably the Group of Seven Ministerial

Bangemann recently installed an Information Society Project Office in Brussels to explain to a sceptical European public what the digital era will mean for them. One of his pet projects is the Bange mann Challenge - a sort of Jeux sans Prontieres for the digital age - in which Euro-pean cities compete for the title of Europe's foremost IT

The DGXIII portfolio is highly technical, but Bangemann - who trained as a lowver and has spent 20 years in German and European politics - is not the typical Brussels technocrat. He prefers to talk about the political and sociological problems of new technology rather than regulations and technical standards.

#### Healthy sceptic

"The most difficult thing to do is for a non-expert to give a speech to experts," he admitted to an andience of 1.200 industry figures at the IT World Congress, held last month in Bilbao, Spain. He has a healthy scepticism about the digital revolution and knows that "new" does not necessarily mean "better".

Take information highways: highways should be faster and more efficient than small roads, but European motorists. especially Germans, know that is not always true," he says. Nevertbeless, 'infohahns' are the key to dragging Europe into the digital age and the rea-

per second as soon as possi-

X.25 network by early next

year. This will allow the elimi-

Of the 460 sites on the X.25

is expected that 60 sites will be

on the ATM network by the

end of this year. In the long

term it is expected there will

be links to research enterprises

German research groups will

not be able to afford to replace

their current equipment with

ATM equipment all at once, so

there is likely to be a lot of

TCP/IP traffic on the network

Delivery of ATM to the

researchers depends on the

availability of compatible ATM

switches. Mr Wilhelm hopes a

standard will emerge this year

to enable the network to invest

in new equipment and make

services available to users next

year. Many potential uses,

ranging from meteorology to

museums, are "just waiting for

across the world.

for several years

move to ATM

Network - Deutsche For-

research institutes, is migrat-

In a project run by Deutsche

Telekom and its snhsidiary

DeTeSystem, the network is

moving to ATM from X.25 tech-

nology and removing leased

DeTeSystem launched the

ATM network, which uses Gen-

eral DataComm switches, at

the CeBit exhibition in Han-

The network's deputy techni-

cal director, Mr Martin Wil-

helm, says they concluded

after a study that ATM was the

best fit to their requirements for a broadband technology for

"It gives us the possibility of dedicated bandwidth," be says.

The existing network, which

uses the TCP/IP protocols

(Transmission control proto-

col/Internet protocol), does not

allow handwidth to be dedi-

This can cause problems for

applications such as videocop-

ferencing, when voice and

"The ear is not as adaptive

video are sent together.

cated to specific applications.

the next three to five years.

nover in March.

ing to ATM technology.

■ Case study • By George Black

German researchers

schungs Netz - centred in Ber- ble," says Mr Wilhelm.

German Research must get up to 155 megabits

son why the EC is so keen to liberalise Europe's telecoms market. Brussels can fund only a token amount of the Ecu 250bn required to build Europe's high-speed mirastruc-ture, so the lion's share will have to come from the tele-

Martin Bangemann: applying th

Most will be privatised by 1998 and, with predators and shareholders watching, reluctant to bankroll the EC's dream of a universal wideband infrastructure. So Bangemann has to apply 'carrot and stick' in liberal dollops. The carrot is the hundreds of EC-funded R&D projects in areas such as teleworking or health care nelworks that aim to stimulate real demand for wideband services. The stick is the raft of directives that since 1990 have prised opened the more lucrative segments of the telecoms market and exposed tho

The experience bas been traumatic and led to frequent clashes between Brussels and the state-owned monopolies. There are growing calls for the EC to "stop the clock" before pushing ahead with further nainful reforms. Last month, Spain hinted that it neight renege on its earlier undertaking to respect the 1998 deadline for full telecommunications liberalisation.

monopoly carriers to competi-

the industry's complaints but believes liberalisation cannot universities, colleges and be integrated with the existing be postponed - "competition nation of many leased lines will be bitter in those situaand thereby save money, it is tions where telecommunications was dominated by n monopoly, but telephone comnetwork, most of the larger panies have to abide by the EC ones will move over to ATM. It

directives". Even with his lawyer background, drafting and interpreting these directives is a legal minefield, and Bangemann favours setting up a separate European regulator to handle the increasing complexity of EC telecoms legislation: "We are not pressing too hard, as some member-states bave problems [with this proposal], hut we will get one," he says.

Bangemann believes mergers are inevitable if Europe is to improve the competitiveness of

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a "Fortress Europe" mentality to protect weak industries. European intransigence was widely blamed for the US walking away from the latest round of World Trade Organisation

sponsored telecom liberalisa-

tion talks in April. "I was deeply disappointed with the breakdown," says Bangemanu, who remains optimistic that an agreement can be struck before the revised deadline of February 1997.

As the countdown to liberal-Isation tacks away. Bangemann is working to ensure the new technologies will be relevant and accessible to all - "one of our biggest fears is [creating] a society with a new separation hetween 'haves' and 'have nots'," he says,

#### Big contrasts

The two-tler information society already exists, IT investment in Denmark was Ecu 624 per capita in 1995 against just Ecu 47 in Greece. Bangemann knows that it will be difficult to close this gap, but be believes the Internet and broadband technologies ran fundamentally change the relationship between commerce and industry, improving the attractiveness of remote areas and regions in decline.

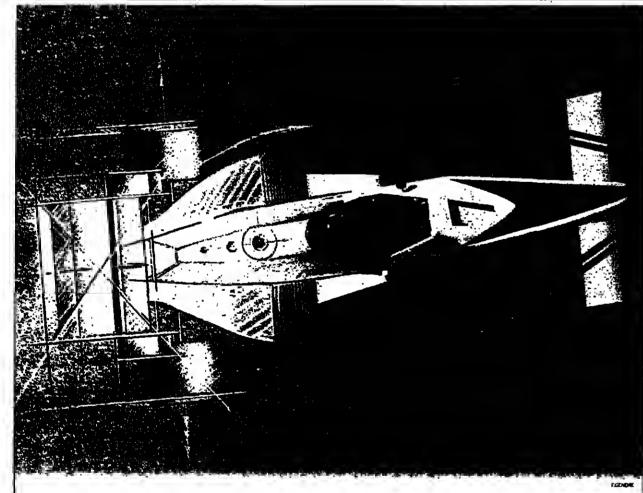
To illustrate this point, Bangemann quotes the examcountry, structured in a very difficult way, but it has built an advanced telecommunications infrastructure."

Finland has exploited this technological odvantage to become an important node on the internet. More notoriously, it has a thriving cottage industry of Internet remailers. which allow users to anonymously post child pornography and Nazi propaganda on the

The issue of Internet censorship is complex and controversial, particularly in Europe where attitudes vary from country to country, but the EC is now looking actively at how it might police the Net.

SECTION SERVICE

"We do not want to over-act, but I do not believe that selfregulation will necessarily its IT sector and warms against work," says Bangemann. MARKET THE BEST CHEST CONTROL OF THE SECOND CONTROL OF THE SECOND



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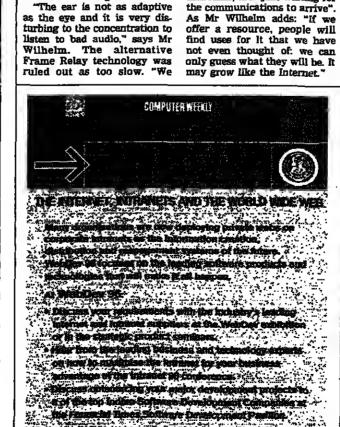
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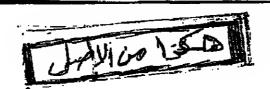
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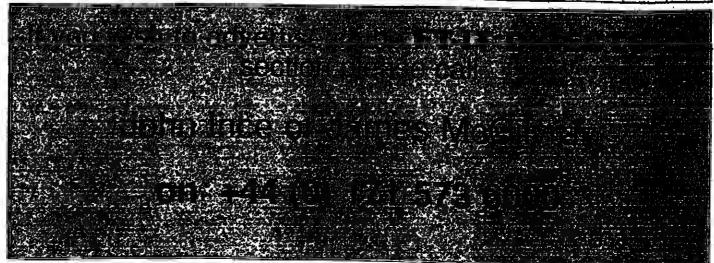
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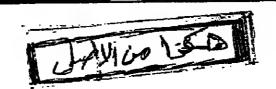
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III Internet software • By Louise Kehoe in San Francisco

# A rush for market dominance

"The Internet is a fantastic thing," says Bill Gates of Microsoft, the software giant. "It makes software and computers more relevant to what is happening in the world. There is something going on here that is very deep ... "

ill Gates, chairman and chicf executive of Microsoft, has become one of the leading advocates of Internet software. His enthusiasm is matched only by his determination to achieve leadership in what is expected to be the fastest growing segment of the software market.

Microsoft's ambitions are, howevar, being hotly chal-lenged by a hoard of new software ventures led by Netscape Communications which has captured an early lead in browsers - the programs used to navigate the World Wide Web and the most visible segment of the Internet software market,

Like the introduction of minicomputers in tha 1970s and personal computers in the early 1980s, Internet computing

in information technology that is expected to bring broad changes to the IT industry and to users. Historically, no company that has dominated one generation of computing has dominated the next, largely because they have been too closely wedded to the legacy of their past success.

"Internet computing will completely recast the dynamics of the software industry," say analysts at Forrester Research, a US market research group. "Microsoft will loose its dominance," they pre-

Yet it may be too soon to dethrons Microsoft. Although Mr Gates acknowledges that his company is the "underdog" in Internet software, he is determined not only to catch up, but to overtake all competirepresents a fundamental shift tors. Over the past six months,

Microsoft has launched a fuselage of products, Intitiatives and acquisitions all aimed at claiming leadership in Internet software. Central to this "fight back" is Internet Explorer, the Microsoft Web browser, which it is making available free of charge via the Internet.

Through agreements with ding online information services and Internet access providers that will offer their subscribers Explorer software, Microsoft is quickly gaining on Netscape. Moreover, later this summer, Microsoft will introduce an upgraded version of Internet Explorer that is expec-ted to match all of the features of Netscape's Navigator program. But the "battle of the browsers" is just the beginning - see report, below. These programs are quickly becoming

the universal "user interface"

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for personal computing and thus become a challenge to Microsoft's core PC operating system business. Already, Netscape has described ambitious plans to transform its Navigator software into a complete PC operating aystem. Microsoft, meanwhile, has demonstrated a new version of Windows that incorporates a

"browser" front end.
"The priority for us is Windows and making sure that Windows is the best Internet platform," says Mr Gates. "Netscape is taking a browser and growing it into an operating system. We are taking an operating system and integrating a

#### **Features**

The latter approach will provide computer users with a "single interface"; software that will enable them to find files stored on a personal computer's internal hard disk in the same way as they currently access information on a remote Internet/intranet

Netscape and Microsoft are also racing to bring new features to their browsers both through their own efforts and hy adding third-party functions. The latest version of Netscape Navigator, for example, incorporates "LiveConnect", a

feature that can be used to

glue add-on applications into

A sales manager might, for example, click on a button to send a query to a database and the results will antomatically be charted by a plug-in program, explains Marc Andrees sen, co-founder of Netscape.

Other Netscape enhance-ments include LiveAudio and LiveVideo capabilities that allow users to view video and hear audio directly from Web pages without waiting to download files to a special "viewer". Whatever technology advantages Netscape may achieve, however, it is unlikely to profit greatly so long as Microsoft is

content to make its competing

Explorer program available

free of charge. Microsoft is also giving away software for Internet "servers the computers that store information distributed over the Internet and intranets, to purchasers of its Windows NT operating system. Netscape. which receives most of its revenues from selling server software, has had to slash prices on its basic server programs in

response. "Our business model works even if all Internet software is free," says Mr Gates. "We are still selling operating systems." Netscape, in contrast, is dependent upon its Internet software for profits, he points out.

Yet browsers and basic serv-

ers are only the starting point for Internet software. One of the next important battle grounds will he in "groopware" for the Internet and intranets; programs that enable people to work collaboratively over a computer network. In this arena. Oracle is claiming to be first past the post. Last month the company announced "InterOffice", a groupware program designed to work with the company's Universal Server multimedia database, which it claims will provide all of the features of established products such as

Lotus Notes, and more. Similarly, Netscape is working on a new browser, codenamed Calileo, that it says will match proprietary groupware features. Meanwhile, Microsoft and Lotus are rejigging their groupware products to incorpo-

rate Internet standards. The most significant challenge to Microsoft'a anthority may, however, come from Java a programming language and development tools from Sun Microsystems that enable the rapid development of "Internet

ready" platform-independent applications. Since its launch last year, Java has taken the programming world by storm. Although even Sun executives acknowledge that Java is immature, it is in active use by thousands of developers, including dozens of innovative start-ups. These are "kids who are willing to live in the 'Big Mac zone,' as opposed to the 'Chez Louis zone'," says Scott McNealy, Sun chief executive. "They start from scratch, and now instead of just developing applications for the Windows world now they can develop

programs for all sorts of com-

puters and network access

#### **Predictions**

Collectively, these start-up companies will overthrow Microsoft's leadership in the software industry, Mr McNealy predicts. He also hopes that they will help him to sell lots of server hardware to build "Java farms" - collections of computers that store and distribute applications to desktop

Internet computing

Recasting the dynamics of the software industry

computers on demand.

Mr Gates dismisses Java as one of dozens of computer languages" that will be used to create applications for the Internet. Neither is he impressed by the idea that Java will fuel the creation of a new generation of downloadahle applications. There are 150m users of Microsoft PC programs, he points out - "just because the Internet is out there, it does not mean that people will throw away their applications."

Moreover, Microsoft Itself is adapting to the network applicatioo model. Mr Gates suggests that in the future PC users may install only the hasic functions of an application on their own computer and access rarely used functions via the network. Unlike leaders of the mainframe computer and minicomputer eras. Microsoft is responding quickly to the changes that threaten to undermine its success. With its greater resources and well-honed tactics for competition, it may yet defy the prophets of doom to maintain

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#### The spread of the Internet - and its internal corporate sibling, the Intranet - is forcing a fundamental change in computer software at every level. New, simple browser software, running on low-cost network computers, offers an alternative to increasingly complex Windows PC systems. Innovative software tools such as Sun's Java language promise to simplify application-building. And the hypertext-linked model of the World Wide Web provides nev

ways to organiso and access One of the biggest challenges facing software developers in the 1990s is to find ways to bring together these new developments from the world of the Internet with existing com-

puter systems. Internet/Intranet systems arc, of course, a variation on the now well-established, client/server approach to systems design. Client/server computing separates the presentation software on the desktop from a range of 'buck room' services each under the control of a server computer.

Most people are now familiar with desktop 'client' systems, including the Apple Macintosh and the Windows PC. Typically, they have formidable processing power in their own right, local disk storage and can support a wide range of software. They call up server computers to access database filea, communications gateways, printing services and. increasingly, the internet. The Internet has introduced a new style of client called o browser (see report, right). A browser is

# Fresh challenge for software developers

The next 12 months will be crucial in the development of useful corporate Internet applications - and server software is a key component in its success

Although client computers are important - the task of bringing Internet computing together with existing systems happens on the backroom server. Server computers must be able to cope with requests from many different client computers at the same time. They need a different kind of software to that found on the

Until recently, the Unix operating aystem has been the mainstay of Internet server computers. Sun Microsystems, the leadar in the Internet server market, uses a version of Unix on lts systems and other suppliers such as Hewlett Packard and Silicon Graphics use variations on Unix, too. But this is starting to change. IBM, for example, has re-positioned Its traditional mainframe systems as general-purpose servers. Rarlier this

ers' to meet the new demands of the market. "The Internet and Intranet are powerful ideas for new

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a relatively simple program applications and we have to NT has moved into the comwhich is designed to 'navigate' respond to the demand for new mercial market, we are seeing ductivity," explains Mr Bill Reedy, a vice president of IBM's software husiness. "Our strong presence in enterorise computing led us to re-package our key services as modular software aervers which can help companies move into the

> BM now offers seven software servers in its range covering everything from its established CICS transaction processing software and DB2 database software to Lotus Notes and the Internet. At the same time, Microsoft has pushed into the server market with its Windows NT

new environment, while keep-

ing control of their legacy

operating system.
"A server is a combination of hardware and software and users are looking for increased resilience and all of the things they were used to with the old mainframe computers." says Mr Peter Blackmore, vice presi dent of Compaq's European systems husiness. "Servers have traditionally been based on the Unix operating system. But as Microsoft's Windows

shows Windows NT has a compound annual growth rate of 120 per cent. Market accep tance is very high and the price/performance of NT is half that of Unix."

Compaq is taking a scatter gun approach to Internet server software. It packages up Microsoft's NT along with Novell's Web server and Netscape's Commerce server free of charge with its range of server computers.

"We think users need to

make their own choices so they can fit in with their existing systems. Our job is to provide a resilient, open hardware platform," Mr Blackmore explains. Microsoft also claims high performance for the Windows NT software - "although Unix is the traditional base for Internet servers. Windows NT is gaining ground, especially where users want to put a server on a local area network. Performance is a key strength of Windows NT and we are two and half times faster than any other server platform," claims Mr Jeremy Cittins, Internet product manager at Microsoft

## Access to the Web . By Paul Taylor

# Battle of the browsers

Although most attention is focused on the contest between Netscape and Microsoft, there are now more than 20 other browsers on the market

arhaps more than any other piece of Internet software, the browser epitomises the strength of Intar-networking and the World Wide Web - access to vast treasures of information using easy-to-use yet incredibly powerful software tools based on internationally recognised standards.

Howaver, It is also in the market for browser software that one of the most bitter Internet software battles is being fought out between Netscape, the California start-up whose Navigator programme currently dominates the hrowssr market with more than 39m users and around an 85 per cent market share, and Microsoft, which antered the hrowser market late, but which appears determined to estab lish its Internet Explorer browser as Navigator's main

On the face of it, it is a true David and Goliath battle since Netscape had annual revenues of just \$81m last year compared with Microsoft's \$6hn.



But Natscape, founded by James Clark and Marc Andreessen and floated on the Nasdaq last year when it was valued at \$4bn, has some powerful allies, such as Oracle and Sun Microsyatsms, a large installed base and loval following particularly among corporates, which account for 70 per cent of its husiness.

Overall, browsers accounted for about 60 per cent of the estimated \$127m in Internet aoftware revenues last year and about a third of the projected \$382m in revenues this year. But the battle between Netscape and Microsoft ia about much more than just internet antiware revenues. As commercial use of the Internet grows and intranets - internal networks based on Internet standards and software - are

"96 of vietors accord 50 sites deployed throughout companies, browsers and hrowser technology are set to become a key element in corporate com-

Already many features of the

hrowser are being built into software operating systems and other applications programmes, belping to turn the browser metaphor into the next-generation graphical user interface. For example, last month Microsoft unveiled plans to combine its top-selling PC software products, such as Microsoft Office, with Internet technologies to enable businesses to huild intranets as part of a strategy to stake claim to leadership in the emerging intranet software

Among the products previewed by Microsoft were new versions of its widely-used Windows PC operating systems, with built-in browser capabilities enabling users to search for information stored on their local computer, on an internal network or on the global Internet.

The company also demonstrated Windows NT Server. with built-in tools for authoring and network management, and a search server for document searching. It also showed Office 97, a new version of its best-selling desktop application suite, that includes technology for publishing and aearching information in the form of Web

Microsoft is "merging the best of the Internet and the best of the PC," said Mr Bill Cates, chairman. "Intranets will bave an Immediate and dramatic impact on husinesses over the next few years," he predicted, by enabling office workers to find and sbare information more efficiently. Microsoft, which already gives away Internet Explorer and its Web server software fres, is sxpscted to put increased competitive pressure on Netscape, in particular, analysts axpect Netscape to be forced to reduce further the prices of its own server products, the company's primary source of profits. Howevar, Netscape, which claims that 92 of the top 100 companies in the US already use its software, shows no signs of surrendering Its lead in the hrowser market

to Microsoft without a fight.

Navigator version boasts a wide range of innovationa including live audio and video and an integrated Internet telepbona feature - has launched a pre-emptive strike against Microsoft by publishing its own intranet vision, via its Internet pages, describing the eneration versions of its Navigator browser program and its Suite Spot software for the Web.

The commany - whose latest

Netscape claims Microsoft's intranet technology forces users to adopt other Microsoft products, in particular its Windows operating system. Netscape's software, in contrast. works with Unix-based systems and Apple Computer's machines as well as with those running Microsoft Windows.

We defined the intranet vision. Microsoft is trying to follow us down that path and put a proprietary tweak on it," said Mr Mike Homer Netscape senior vice-president of marketing, last month.

or the moment, most independent analysts agree that Netscape's latest browser maintains its technological lead over the latest version of Microsoft's Internet Explorer, but, with new versions coming out every few months, the gap is closing. Apart from Netscape and

Microsoft, there are more than 20 other browsers on the mar ket. In a recently published report. Forrester Research divided them into three categories based on technology and architecture: ☐ The laggards. These

browsers, argues Forrester make using the Weh painful because they do not support the latest version of 'Hypertext Mark Up Language,' (HTML). ☐ The pack. This group includes 'credible browsers'

such as CNN, Spry and Netcom's NetCruiser, but Forrester says they are "increasingly winded as they try to keep pace with Netscape". ☐ The leaders. Netscape,

says Forrester, qualifies for this category "because it is setting the Web software agenda." Microsoft is placed in this category even though its browser is technically a generation behind Netscape, because "It bas a strstegy for evolving Internet Explorer, and the financial and marketing clout to become a serious contender".

Most analysts believe, however, that the market is on the verge of a wave of consolidation driven in part, by the trend for the browser to become increasingly 'personalised' as users add bookmarks and other browser-specific data and programmes making lt increasingly difficult to persuade seasoned users to switch browsers. This, it is argued. will drive the market towards Netscape and Microsoft - both of which have particular strengths and advantages deter new start ups and cause

Software applications: merchant servers • By Rod Newing

#### s Web sites become interactive, the current husiness model - which requires visitors to switch off their modems and pick up the telephone to place an order -

A new breed of Web software, called "merchant servers", is just around the corner which will allow visitors to place their orders and make payment securely whilst on the

is about to disappear.

Sitting between the user and the organisation's existing internal systems, these servers provide a range of services for electronic trading. They have the ability to display product details held in a separate database, to search for products, Ill an electronic shopping hasket with purchases, process orders, carry out user identifiestion, apply for a credit account, check credit, process scure payments, capture visior preferences, carry out customised micromarketing, offer coupons and discounts, handle sales taxes and provide reports.

Browsers can download an electronic shopping basket, which will then hold their credit card details and delivery address. It will enable credit card processing and secure payment and may be incorporated into a future operating Systems. The servers have also

# Electronic shopping on the Web

Home shopping is likely to be eclipsed by business-to-business electronic trading games at http://sales.atlanused hy WorldView Systems Visa is also developing Netbeen designed to anpport

future electronic cash systems. Microsoft's new Merchant Server was demonstrated to 50 retailers in Washington in February and incorporates features from their feedback. Merchant Server currently

only works with Microsoft's own Windows NT operating system and its browser, internet Explorer. Only Explorer has the built-in security and encryption which electronic commerce requires, although it will soon follow in other browsers. Secure Electronic Trading ('SET') is the new publicly available standard which allows merchant servers to verify the identity of legitimate buyers and reassure them of the legitimacy of sellers.

### Payment

SET is designed to guarantee the provision of goods and services and subsequent payment. Visa and MasterCard hava developed it together with Microsoft, GTE, IBM and Netscape. The specification should be available through http:// www.visa.com or http://

Bill, with Carnegie Mellon University, which will aggregate small transactions into larger sums which can be accounted for through credit card billing. Great Universal Stores (http:// shoppersuniverse.com) and Wallmart are beta testing Merchant Server at their respective electronic shopping malls.

When goods have been examined and selected, payment is by debit or credit card, using SET. Open Market Inc (http:// www.openmorket.com) has developed OM Transact, which is a top-end merchant server product aimed at very large retailers and Internet Service Providers (ISPs). They have the momentum

and power to get commerce on to the Net," says Greg Pone. European general manager for Open Market, "Publishers are also important, because they have the content. And catalogue shopping companies are potential users."

IBM (http://www.internet.ibm.com) bas recently announced Net.Commarce (http://net.commerce.fbm.com). which it has already used to sell tickets for tha Olympic

ta.olympic.org. L.L.Bean, the US catalogue retailer, will be the first commercial customer, with a service commencing in the third

quarter of 1996. IBM is also offering to host on-line catalogues to allow organisations to trade electronically without incurring a high initial investment on the strength of unquantified benefits (http:// unuw.ecs.hosting.ibm.com/ims ims htmf)

### New services

Lotus (http://www.lotus.com) is developing a new set of applications designed to introduce new core services to the Internet. The first of these 'e-applications' is Lotus Notes:Newsstand, which is used by information providers to publish material to subscribers. Additional applications are being developed for electronic data interchange, enhanced security, credit card processing, subscription management, customer service, and hilling.

Netscape (http://home.net-

scope.com) has Merchant Sys-

and Sabre for their travel service at http://travelocity.com. Andersen Consulting and EDS are implementation partners. Netscape has just announced LivePayment, which extends Netscape's SuiteSpot Web servers with a set of templates which allow webmasters to build electronic commerce

Netscaps has also set up Actra ('Active Transactions') Business Systems, jointly with GE Information Services, the world's leading provider of business-to-business electronic commerce. This move is aimed at bringing the considerable advantages of EDI to a wider husiness community using internet technology.

applications themselves

Rob Lewis, IBM's European Marketspace manager has a very balanced view of electronic trading: "Any electronic mall service is limited by the slow speeds of home modems and by tha limitations of graphics and images that the web server provides.

"Browsing for products is frustratingly slow, but you can shop when you want and move quickly between stores.

"Where the electronic mall will have added strength is in the new enhanced features. such as micro-marketing, personalised shopping and comparison shopping techniques."

Electronic shopping is going to be a valuable additional service on the Web, but It is possible that home shopping will be eclipsed by business-to-business electronic trading. Businesses have faster links to the Web and bigger purchas-

ing budgets than housebolds. A recent survey of large companies by Barclays, the UK high street bank (http:// www.barcfays.co.uk/psmd/ business/purchaseonline), found that nearly half of them want to use the Internet to order goods and services direct. Shoppers' Universa already

includes a small business-tobusiness section and General Electric have set up a significant trading opportunity batween businesses at http:// roww.ge\_com/ton/. These new slectronic trading

systems will need to be aimed at other businesses - not homes - if the revanue-earning potential of the Web is to be

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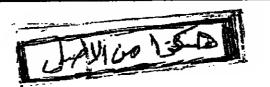
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# FOREIGN EXCHANGE

# Central banks steady the markets

During the uneasy quiet which now prevails the industry faces a period of

erestructuring. But, asks Philip Gawith, how long will the calm last?

Anyone inclinad to tha fashionable thesis that in an era of global capitalism, power is seeping inexorably from state to market need look no further than the foreign exchange markets for a convincing rebuttal.

now colour

Central banks and finance ministries have scored a convincing victory over their old foe, the currency trader, with exchange markets currently more benign than for many

The dollar has rallied strongly after its historic lows last year, tha yen and the D-Mark have both weakened appreciably, providing much needed stimuli to their ailing economies, and the level of volatility in the main currencies is approaching record lows

This period of stability is testimony to a greater sense of common purpose among G-7 partners, backed by real policy measures, than has existed for a long time. Last week Larry Summers, the deputy secretary of the US Treasury, told a New York audience; "The only path to enduring exchange market stability is through the pursuit of sound economic policles." The message from the markets s that the G-7 is on that path. However, it is a slightly uneasy calm that prevails. Historically, the longer that mar-kets stay quiet, the fiercer the subsequent move. It is almost a year since central banks last intervened together to stabilise

currency markets . - a

protracted peace by the stan-

dards of recent years.

Two questions in particular are occupying the market. The most important coocerns the dollar - is the rally of the past year likely to be sustained? Does it represent a fundamental turn in the trend after more than 20 years of steady depreci-ation in the world's leading reserve and trading currency, or is it simply an upward blip within the ongoing downward trend? Much money will be

made and lost getting the cor-rect answer to that question. The other fundamental question concerns the path to a single currency in Europe. Will traders still be trading D-Marks, francs, pesetas and liras in 1999, or will they all have been subsumed in the

There is a tantalising absence of consensus on both of these questions. While the market remains broadly positiva about the outlook for the dollar, there is still considerable scepticism about whether it can really have shaken off its bad old ways. As for Europe, nobody undarestimates the collective political will, but the combination of a rigid timetable and a process driven relentlessly by politicians' and bureaucrats against a backdrop of widespread popular scepticism, leaves an ugly bout of indigestion a distinct

From a purely selfish perspective, this is what many in the currency markets will be hoping for. For if there is one constituency in the world which does not enjoy the era of New Age economics, where all governments sing from the same hymn sheet of fiscal and monetary probity, it is foreign

exchange traders. The mood in the industry is subdued, with keen competition and calm markets proving an unpromising trading environment. Paul Chappell, head of foreign exchange at Bank of America in London, says: "1996 going to be struggling to meet their budgets."

The conundrum the industry faces is, in the words of one manager: "Is it a drought, or do we live in a desert?" Will the industry return to the fat years of 1992/3, or must it learn to live with the current market

Most dealing room managers are confident the music will start to play again - thet the current policy consansus between leading industrial nations will unravel, prompting renewed exchange rate tur-

But aven if they are right, it is unlikely to offer more than a temporary respite from the far-reaching challenges the Optimists will report that

they have been bere before -

Everybody is hoping for a return to the days when central banks threw money at the markets

back in 1991, a backdrop of quiet markets led many to question the future of the business, only for huge turbulence in the European exchange rate mechanism in 1992/93 to restore fortunes.

Only the most sanguine, however, believe this will do more than delay the inevitable. Market turnover may continue to grow - the most recent survey from the Bank for International Settlements suggests total daily turnover grew by 30 per cent from 1992 to reach about \$1,200bn/day in 1995 but fierce competition and the onward march of technology have put profits under preshas been a very quiet year so it sure, especially in the main is very likely that people are currencles where hage volumes are traded for little or no

Guy Whittaker, head of global foreign exchange at Citibank, said recently that after 30 years of sustained growth in the industry, "we have perhaps reached a point where, because of a changing environment and new technology, the growth of capacity of the market has exceeded the growth in demand." As with the rest of the bank-

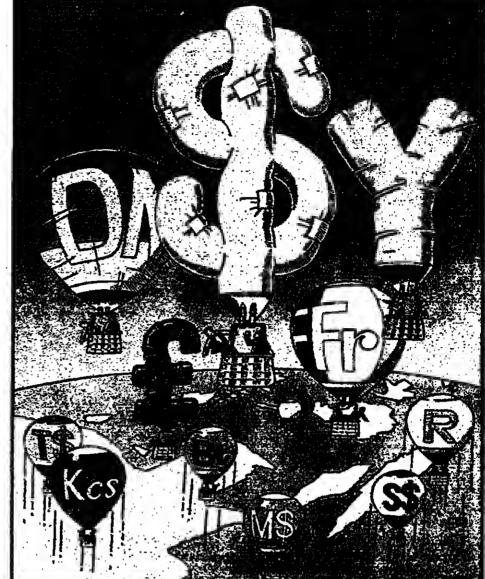
ing industry, it is increasingly the case that machines can do some of the the work more cheaply and more efficiently than people. Partly, this involves labour intensive, back-office administrative work. But the front office is by no means immune. The nowerful growth of electronic broking systems means that prices can, in many cases, be accessed from a machine. Reuters 2000-2 and EBS, the two electronic systems which allow trades to be done by matching buy and sell orders that have been put into the system, have carved out a large market share. This has come at the expense of both the voice-broking and the larger banks, who have lost much of the business they used to receive from smaller banks.

Klaus Said, head of foreign exchange at JP Morgan in New York, says: "I can very easily see where you have fewer traders and essentially no, or very little, interbank market making beyond gentlemen's agreements, with electronic broking used to get you out of your positions.

It is no wonder then that the spot trader, that most hoary of all market stereotypes, and bane of finance ministries over tha years, appears an increasingly threatened species. Privately, most managers of

large dealing rooms agree that a significant shrink in the head count over the next few years - 30-40 per cent is not contro-versial - is inevitable.

Technology is not the only factor at work here. Consolidation and centralisation are two other important themes, both of which will cause job losses. The best example of consolidation is the merger of Chase and Chemical banks to form the new Chase, a potential contender for Citibank's status as



the dominant foreign exchange bank, but also one now carrying on business with 20 per cent less staff. The merger of the Bank of Tokyo and Mitsubishi was also a significant one for the markets.

This sort of shrinkage has. ramifications across the industry. There have already been significant job losses in the broking community, caused in part by the rapid growth of electronic broking, but also aggravated by the disappearance of important customers through merger.

Centralisation is also in vogue. Increasingly banks are closing many of their smaller trading rooms in minor centheir price-making capabilities in a few regional hubs, such as London, New York and Singapore. Local branches are then used as marketing outlets which only make prices in the domestic currency. From a global perspective, this process has involved hig job losses, although this is not so evident in the large centres which, if

ciaries. Mr Whittaker cites the case of Citibank: eight years ago the hank had 39 spot dollar/D-Mark dealers trading in 17 independent centres just in Europe. Today we do more business and serve more customers in dollar/D-Mark with only six

anything, could be not benefi-

tres." Even if Citibank was decentralised to a fault, with different branches acting as competing flefdoms, a similar story can be told at most other large banks.

In the meantime, banks have no choice but to play the hand they have been dealt. Jim O'Neill, chief currency economist at Goldman Sachs in New York believes that it is "a period when the real franchise players with big client business are likely to stand out

Certainly, there is more talk than ever about the customer. With technology baving made the commodity end of the business increasingly unprofitable, tres, preferring to centralise - dealers operating in two cen . there is a clear shift in focus

from transactions to advice, with banks and brokers anxiously trying to move up the value-added chain to preserve their margins.

"Five years ago it was all about price. Now it's about relationships, Idea generation and research," says Jeremy Hodges, head of foreign exchange sales at Bankers Trust in London. "The customers of today are far more sophisticated than they have

The future, then, is shaping up as one where fewer, more highly trained staff are employed, with far more effort, attention and resources devoted to customer service, and far less to purely transactional jobs where little value is

Customers, in turn, will be asked to pay for this service. At the moment, says Mr Said, "this market is dramatically slewed towards the client like oo market I have ever seen".

But while the industry is having to face up to some difficult decisions, particularly on the cost side, there are also some bright spots. The most ohvious is the growth in emerging markets currency trading. Margins are better. but risks are also higher, and there is no short cut to expertise in these markets.

There is no doubt, though that these currencies will play an increasingly important role most dealing rooms.

Options are another growth area, particularly in the form of exotic options. While some banks and customers have burned their fingers, their superiority as hedging instruments seems likely to ensure that they will cootinue to grow, possibly cannibalising the spot market in the process.

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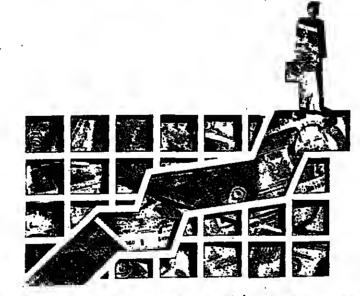
While growth opportunities remain and have to be seized. the industry's current focus is more inward - on achieving a cost base that is sustainable through quiet markets, and improving returns on capital. Everybody, however, is boping for a revenue surprise - a return to the good old days when central banks obligingly threw money at the markets. History may record the pres-

ent period as a one-off shift to lower price volatility, driven by greater policy convergence. That is the keen desire of politicians and central bankers. If not, the time may be approaching for the pendulum to swing





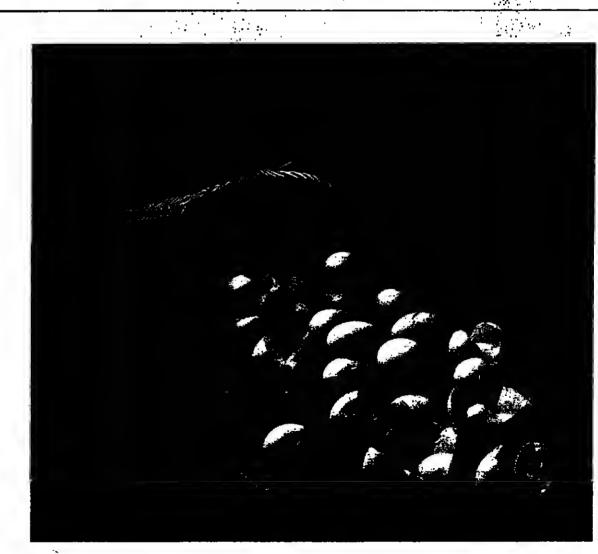




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### The impact of a strong currency

Japan: by William Dawkins

# Yen's rise prompts exodus

manufacturers are shifting production to cheaper locations offshore

Toyota, Japan's largest car producer, will in two years' time start making eogines in China, its first significant foothold in this potentially enormous market.

Hardly a week goes hy in Tokyo without a top manufacturing company announcing a project in Asia, whether it be a tentative first step into the wilds of China or a semiconductor plant in an advanced, newly-industrialised economy such as Singapore.

What has changed in the motives of Toyota and otbers for their expansion overseas? Until recently, the main driving force was the strength of

The ven has risen by 83 per cent against the dollar since 1985

the yen. But deeper factors are also at work, Japan, once supreme in mass production, is being overtaken hy its more recently industrialised neighbours. It now faces the challenge of how to find new high-

compete, at present the top priority for its industrial policy planners at the ministry of international trade and indus-

try.
The climb of the yen alone has been a powerful stimulus for change. Since the end of 1985, the currency's value against the dollar has risen by 83 per cent to around Y109, touching a hair-raising record of Y79.75 in April last year.

Manufacturers have esponded correspondingly fast in shifting new production to cheaper locations offshore. though they have been slower in shedding redundant capaclty at home, a legacy of the largest companies' continued promise to provide lifetime Over the past near-decade.

the share of Japanese companies' production offshore has risen from 3 per cent to 7.9 per cent at the latest Miti count at the end of 1994. Since then, the signs are that growth in the share of foreign output has accelerated. The total could reach 20 per cent in the next three to four years - about the same as in the US now according to the Japan External Trade Organisation. Already, Japanese manufacturers produce more abroad than

The exodus, it appears, has picked up a momentum too strong to be chacked by the

exchange rate since the middle of last year. In the 12 months to March 1996, Japanese foreign direct investment rose by

per cent to a four-year high of Y4.957bn and new foreign investment plans arrive thick

Japan's first wave of foreign investment in the early 1980s was primarily to supply its main existing overseas mar-kets - the US and Europe and Japan more cheaply. But over the past decade, the focus has awitched towards faster growing and more profitable markets in Asia. Overall, foreign direct investment in North America declined from just over half of the total when Japan'a FDI peaked in 1989, to 45 per cent last year, while the

doubled to 24 per cent over the same period, according to the

As the focus of new production has switched to Asia, so the new arrivals have started to put down local roots more deeply than before. They have invested more in servicing local markets, and moved some research and development and even management functions out of Japan.

Japanese companies' local units reinvested 60 per cent of their local profits on increasing capacity for local markets. rather than exporting, twice as much as five years ago, according to Jetro's 1996 white paper. More companies are setting up local headquarters with decision-making responsibility, it

Meanwhile, Japanese companies' domestic spending on research and development started to decline three years ago for the first time since the war, since when foreign offshoots' R&D has correspondingly risen, according to a recent Miti survey.

It all points to a decisive move away from the centralised, domestically oriented traditioo of Japan's top companies. That suggests that the shift of capacity offshore should, as Jetro believes, continue to rise to the levels achieved hy other mature econ-

## Managing exchange rate fluctuations

■ Fund manager case study: Guinness Flight • By Philip Coggan

John Stopford's team looks after around \$1.3bn of assets with a currency overlay

increasingly aware that they need to take a view on currency movements, as well as on the prospects for bonds and

John Stopford, a portfolio manager at UK fund manage-ment group Guinness Flight, is one of n team which looks after the currency exposure of the group, plus a range of onshore and offshore currency and bond funds for retail and institutional investors. The team looks after around \$1.3hn of assets with a currency overlay.

We have heen managing currencies as a separate asset class from bonds and equities since as far back as 1980," he says. "That means putting a currency overlay on all our bond and equity funds. What is good for bonds and equities isn't necessarily good for currencies. So just because we are invested in US treasuries doesn't mean we are in dollars to the same extent."

Frequently in recent years. currencies have been moving in the opposite direction from

"Over the past year, the optimal strategy has been to be long the Nikkei 225 and short the yen", Mr Stopford says. The decisions on currency

atrategy are taken by the easonable amount of success we feel it's important to generate ideas internally," says Mr

The team has a disciplined process of quarterly, monthly and weekly meetings, during which it looks at what Mr Stopford calls "compelling forces those key factors which we think drive exchange rates over the medium and long term." Each month the factors are "scored" by the team to help members reach a view on

"In the very long term, currencies move to offset changes in competitiveness," he says. "Relative prices are important, and while purchasing power parity doesn't hold true all the time, it does have an influence." The team also considers other long-term factors such as if a country runs a consistent current account deficit.

But, Mr Stopford says that "in the short term, currencies can deviate quite a lot from their long-term path." The Guinness Flight team accordingly looks at factors which such as "short-term interest rates, real bond yields, direct investment flows, whether the trade position is worsening or improving, and whether cen-

tral banks are intervening Chart patterns, or technical

hn Stopford: It is important to

analysis, can also play a role in determining the team's short-term view, as can noneconomic factors such as polities. All in all, the scoring promeans that, according to Mr Stopford, "we might be wrong about individual factors but on balance, hopefully, the totals are pointing in the right

The process also limits the tendency for the managers to

dealing activity. "We are strategic investors rather than traders and we add value by taking a long-term view, we can't out-trade the market," says Mr Stopford.

Once the team has decided on its view, the appropriate funds will move in the same direction (and at the same time). "Our dealing will be done using one of a number of City financial institutions For credit reasons, we spread the risk pretty carefully, and we look at pricing and quality of research.

At the start of the year, he says, the currency decisions were relativaly easy. Japan and Germany had easy money policies, the Jepanese current account was deteriorating, and the respective authorities were talking down their exchange. rates. "That made it smart to be long dollars and short yen," says Mr Stopford.

The decisions are harder now. "The US dollar no longer looks that cheap and the DM. and yen no longer look that expensive. "The Italian lire and Swedish krone have moved from being undervalued. We remain long of the dollar but we have reduced our positions gradually. We have nlso reduced positions in peripheral currencies."

■ International company case study: Marzotto • By Andrew Hill

## ■ Germany: by Andrew Fisher -Mark dip suits exporters

The stagnating economy now looks like moving back hesitantly to a growth path

Germany's exporters are breathing more easily this year. Already under pressure from high domestic labour costs and taxes, they bore an extra burden in 1995 as the D-Mark soared against the dollar and several European currencles. But now the treod has been reversed and the German currency is back to its levels at

> The D-Mark is back to its levels at the beginning of last year

the beginning of last year. This is positive news for a stagnating economy which looks like moving hesitantly back to a growth path. With private consumption and industrial investments lacking any real impetus, exports are the economy's main support.

Encouragingly, the Bundesbank said in its June monthly report that exports had stahilised at the high level of the second half of 1995. The correction of the D-Mark's overvaluation of last year had bright ened the export outlook and also improved companies' prof-

April 1995, the dollar has climbed above DM1.53, with economists expecting it to strengthen to perhaps DM1.60. At the peak of the D-Mark's rise last year, it had riseo by 6 per cent against the currencies of the 18 most important industrialised countries.

against the dollar, 20 per cent against the lira and 10 per cent against sterling. It was less extreme against the peseta and. the Portuguese escudo. 'It has taken 14 months to level the unjustified apprecia-

tion of the D-Mark in the first quarter of 1995," Bank Julius Baer said in its latest economic snmmary. However, the changed currency trend also meant economic growth in Germany's neighbours would

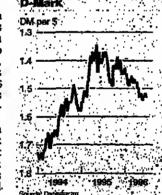
From a low of DM1.3450 in

The D-Mark's revaluation last year reached 14 per cent

weaken once the impact of

their depreciations had worn off. Thus they were likely to cut interest rates to choke off further rises in their curren-

The combination of high costs, currency uncertainties and a desire to gain access to



new markets has led to a rapid increase in German companies' investment abroad. Last year, the total nearly donbled to around DM50bn, while foreign investment in Germany was only DM13bn.

Several hig transactions in the insurance, pharmaceuticals German investment abroad, the hulk of which went to the European Union and the US.

But German companies are also investing more in southeast Asia and eastern Europe, Increasingly, the Bundesbank noted, exporters are incorporating cheaper foreign components into their export prod-

Thus higher exports do not fully benefit the German economy. Also, foreign order figures could be exaggerated through inclusion of contracts that companies pass on to low-So while the D-Mark's

strength may have abated, exporters are still striving to cut costs and offset the Impacts of currency shifts. Moreover, the currency could come under further revaluation pressure if markets thought a postponement of European monetary union aimed at stabilising economic and currency conditions - was

Tha Bundesbank, however, will be anxious to ensure that the D-Mark does not enter Emu at too high a level, locking the country in from the start at

#### Just over two-thirds of the company's L2,400bn turnover consists of sales

Pietro Marzotto is looking forward to the arrival of a single European currency, if only because it could save him a little of the time he has to spend every Tuesday discussing exchange rates with the financial managers of Marzotto, the quoted Italian clothing and textiles group of which

outside Italy

he is chairman. Just over two-thirds of Marzotto's annual turnover of L2,400bn is represented by sales outside Italy. The group also has production based in Germany (It controls Hugo Boss, the German menswear group), France, the Czech Republic and Tunisia.

While the lira was in the European exchange rate mechanism, control of movements against other European currencles was relatively simple. But the precipitate departure of the Italian currency in September 1992 ushered in a new period of exchange rate volatility, exacerbated by domestic political uncertainty.

Marzotto's 1995 report and

exchange rata against the D-Mark - the most important currency for Marzotto - was L1.130.88.

That compares with L996.52 in 1994 and £1,071.6 in the first quarter of this year. Now analysts talk about the lira re-entering the ERM at a central rate of some L1.000.

Under the circumstances Pietro Marzotto is understandably cautious about forecasting a consolidated result in lira. In his message to shareholders he directs attention to the more stable Ecu-denominated profit and loss account.

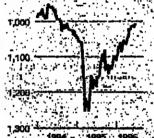
End-year translation effects are only part of the problem facing Marzotto, however. The 1992 devaluation was widely interpreted as a boon for Italian exporters. But whereas small Italian companies were able to take advantage of the weak lira with single order raids on the export market, Marzotto could not afford to be held hostage by a volatile currency. In 1993, prompted by the lira's exit from the ERM, the company introduced a new system of hedging and control

over exchange rates. Mr Marzotto is proud of the new system, and reluctant to reveal it in detail, but the central instrument for controlling accounts underline the prob-

man and his top executives. In the report, the company assesses its commitments to foreign currencies - credits and firm orders, less balancesheet debt, plus the forecasts for future orders and expenses. It then borrows in local currency, or occasionally uses foreign exchange swaps, to cover

report, analysed by the chair-

Lira per OM:



part of the risk. The level of coverage is cyclical, as the business is in part based on the presentation of each season's fashion collections. "Gradually, as forecasta hecome more certain, we

increase the coverage," says Mr Marzotto. The report also allows the group's executives to examine what would happen if all Marzotto's foreign currency debts. orders and commitments were snapshot of the group's exposure to currencies. Foreign subsidiaries, Including Hugo Boss, now use a similar sys-

Tha system has allowed a clearer picture of underlying: trading at Marzotto to emerge from the currency turbulence. In fact, in the past three years, weak demand in core markets has had a greater impact on Marzotto'a results than exchange rate movements. Marzotto's 1995 report explains that the lira's weakness last year "did not, in fact, benefit the operating margins and the profitability inthat ... higher costs were incurred for goods and services and negative exchange differences on the settlement of financing in foreign currency.

rate fluctuation. Now the lira is strengthening. Marzotto also faces a squeeze on its export margins. with long-term clients reluctant to pay higher prices. No amount of sophisticated currency hedging, it seems, canhelp soften the tough commercial reality of working in world



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## ■ Europe: by Lionel Barber

# Traders are warming to Emu

The financial markets have sensed the political will behind

monetary union Something strange happened in the foreign exchange mar-kets this spring: Traders, long sceptical about economic and monetary union, turned into

The shift in sentiment created a measure of stability in the exchange rate mechanism and a narrowing of long-term and potential Emn participants, notably France. All this curred despite a slowdown in the European economy, persistent high unemployment, and the surprise news that Germany's budget deficit for 1995 exceeded the Maastricht treaty target of 3 per cent of

GDP. What is going on? The first explanation is that the financial markets have finally sensed the formidable political will behind the Emu project. This is true of Chancelior Helmut Kohl who sees monetary union as the cornerstone of a more politically integrated Europe; and it is even truer of eilte political opinion in France.

The turning point came last November when President Chirac abandoned equivocation and sanctioned n severe squeeze on public spending. Prime Minister Alain Juppé initially mishandled the package of spending cuts which stirred up violent street protests; but by the New Year, calm returned and the bulk of the cuts, including reforms in social security, remain intact. Now Germany has embarked

The second explanation is that markets have woken up to the fact that the technical obstacles to Rmp, though daunting, are manageable. The European Commission and the European Monetary Institute are confident that all work will be wrapped up hy the end man-led proposals for a stability pact to enforce budgetary discipline among Emu participants, and the politically con-tentious relationship between those willing and able to join Emn and those unable or unwilling - the so-called "ins"

and "outs".

Last April, at a meeting in Verona, Italy, EU finance min-isters agreed in principle on the creation of a new model **ERM** which would preserve the current 15 per cent fluctu ation bands for currencies D-Mark as anchor currency. The future European Centra Bank would offer limited intervention to support currencies in difficulty, but the onus would be on member states to put their own house in order. More important, the ECB would have the power to propose a currency realignment, remedying nne of the defects in the present system where countries can delay adjustment for political rea-

Finally, tha markets have grasped that Ewn will ultimately be a political decision to be taken by EU heads of government in the spring of 1998 (under the British presidency). This should allow a measure of flexibility in the interpretation of the Maastricht criteria, particularly on the ratio of government debt to GDP which is supposed to be 60 per cent or approaching the target at a satisfactory rate. Last month, EU finance ministers decreed that both Denmark and Ireland met the Maastricht targets because their debt ratio was declining

FT Surveys

at an appropriate pace, despite

None of this suggests that Emn is guaranteed to go ahead on January 1, 1999. The higgest uncertainty is the performance of the European econ-

omy. Only three countries.

Denmark, Ireland, and Luxem bourg, meet the Maastricht criteria. Without a return to growth, France and Germany will struggle to get near the budget deficit target of 3 per

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aimed at reducing exchange

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(57. -

# Debate rages on derivatives Herstatt lessons learned

David DeRosa also show that

during the 1986-95 period,

hedged returns on global

equity and bond indices were

roughly double or half of those

of corresponding unhedged

returns, depending on which

side of the currency the inves-

Mr DeRosa believes that the

onward march of derivatives is

ineluctable, with the bad expe-

riences largely behind it.

Interest is so great that it is

only a matter of time before

the market learns how to use

these products. I see this tre-

mendous effort in the way of

education and new systems for

risk monitoring. This paves the

way for increased use of deriv-

There is also evidence that

the knowledge gap between dealers and users has closed to

the point where there is

greater mntuality of purpose

than sometimes existed in the

Les Halpin, managing direc-

tor at Record Treasury, a cur-

rency risk management group.

says customers are favouring

simpler products that are

took at strategies which reduce

risk. In the past people asked: bow can we add to return, but

the only way you can add to

return is by adding to risk,"

"We are being asked more to

easier to understand.

Customers are now seeking to hedge their risks rather than improve returns

You will not travel far in the foreign exchange business without tripping over the phrase "risk management". As markets mature and margins disappear from the business of spot foreign exchange, banks are seeking tocreasingly to find a new role for themselves under the guise of offering a risk management service.
On the face of it, this is no

more than an appeal to common sense. But the devil; as ever, is in the details. Derivatives are key risk management tools, but in the wrong hands they can aggravate rather than reduce risks and the industry remains saddled with the legacy of many large losses which, rightly or wrongly, are attributed to the use of deriva-

A debate continues to rage about their usefulness and the temperature rose recently with the appearance of a provocative article "Why derivatives doo't reduce FX risk" to the McKinsey Quarterly. Authors Tom Copeland and Yash Joshi wrote: "The sad truth about foreign exchange risk management programmes is that most would not pass the doctor's basic test: First, do no harm...it is clear that many

programmes destroy value instead of protecting it." They cootinue; "Of all the variables that influence a tion that FX risk is not worth firm's financial performance, FX is but a minor contributor to total risk, except in the event of catastrophic currency failures ... " And even if the

I'VE WORKED IT OUT-IF THEY TAKE THE RISK OUT OF BANKING OUR LIVES WILL BE 0.0002 PERCENT LESS EXCITING



200 large companies suggested hedging may not be much help in addressing the problem. They found that in only 20 cases would income volatility be reduced by more than 10 per-

This is not a very helpful age for those manning the options desks of large banks which market these instruments as useful bedging tools. Unsurprisingly, the McKinsey analysis is vigorously contested. Zar Amrolia, global head of FX options marketing at Deutsche Morgan Grenfell. says the critique is misconat risk in isolation without considering returns.

He argues that a successful hedging programme can increase the value of a company by "adding to the growth in cash flows and reducing the cost of funding". He also contests the asser

hedging, citing the 1994 case where Matsushita lost \$1.7bn in translation exposure due to currency fluctuations when it ■ Netting: by George Graham

Banks have taken a number of steps to reduce payment risks in the foreign

exchange market ject in entirely the same way. As the options business has When Bankhaus Herstatt, a matured, traders have resorted small Cologne bank, collapsed increasingly to using exotic in 1974, it cost its foreign options, rather than vanilla exchange trading partners more than \$620m in uncom-The most common type of pleted deals and created a exotic option, the fastest growwhole new category of risk for ing part of the business, are central bankers to worry

The focus, therefore has

shifted to protecting the down-

side rather than trying to

It is not clear, however, that

hanks are looking at the sub-

option is in or out of the

For all the appeal, exotics

are a complicated area, and

some banks have paid heavily

for their inability to develop

suitable modelling systems to

One US-based trader com-

nents: "Someone new falls on

their sword every day. There is

a lot of blood ont there."

Clearly it is not only customers

who are at risk from dabbling

in areas they do not under-

value these options.

improve the upside.

options.

those with a binary, or fixed pay-out, structure. These are Two decades later, what has become known as Herstatt risk sentially bets - either they are right or wrong, at very appears at last to be on the price specific points. A regular verge of being dealt with, or at currency option, by contrast, st sharply reduced. has a much more incremental Banks have taken a number effect, with the pay-out based

of initiatives aimed at reducing payment risk in the foreign axchange market, either through netting agreements, which allow banks to offset the amounts they owe each other, or through some form of cen-tralised clearing house.

Bilateral netting services are operated by a number of groups such as FXNET, a partpership of 12 leading banks. Swift, the global payment message network, and Valunet, run by the International Clear-

These systems allow any two banks to offset the gross sums fruition, it would virtually

up only the net difference. Many banks still do not use

these services, however, and many that do still use only "close-out netting", which is only triggered by some defined event such as the appointment of a liquidator, Routinely, they still tend to pay each other in

Since last August, the concept of netting has extended on to a multilateral basis with the creation of the Exchange Clearing House, or Echo. Participants make payments not to each other but to the clearing house, significantly reducing the number of payments they have to make and thus, it is

hoped, their exposure. A competitor called Multinet sponsored by a number of US and Canadian banks, is still

awaiting regulatory approval.

But the initiative which has excited most interest is the work of 17 of the world's largest foreign exchange banks, which have oddly dubbed themselves the Group of 20, on the establishment of a global clearing bouse bank providing an instantaneous foreign exchange settlement system linked to national payment systems such as the UK's Chaps or the US's Fedwire.

If the G-20 project comes to

they owe each other, and settle eliminate a whole tranche of risk from the world financial system.

Because payment for both sides of a foreign exchange deal would be made simultaneously, banks would no longer be left in the position, as they were by Herstatt, of baying paid up their side of the bargain but not baving

received anything in return. From the ceotral banks' point of view, It is not a moment too soon for the commercial banks to be addressing the issue of payment risk. Twenty-two years bave

sed without another shock to the foreign exchange mar-kets on the scale of Herstatt, and some commercial banks have grown unwilling to invest serious money in addressing a risk which appears remote.

To the central banks, tbc risks appear anything but remote. They have been constantly reminded by such crises as the failure in 1990 of Drexel Burnham Lambert, the US investment bank, and the Bank of Credit and Commerce International (BCCI) in 1991, or the attempted coup d'etat in Moscow in 1991.

Last year, the collapse of Baring Brothers, the UK bank, threatened to block the settlement of Ecu50bn (£39bn) of

than I per cent of them.

The problem is that while the risk of another Herstatt is small, the sums traded in the foreign exchange markets are now so large thet even that tiny risk is unacceptable.

The risk is not zero. It may be point zero, zero, zero, but there is a significant digit." said John Reed, chairman of Citibank, one of the world's largest foreign exchange deal-

What remains to be settled is which of the various initiatives will win the day. Some banks argue that netting and realtime settlement systems such as the G-20 project are complementary, but the reality has been that a number of potential participants have held back from the multilateral netting schemes while they see if the G-20 can get off the ground. "At the end of the day, it will

be the G-20, because that is where all the big boys are," said one London foreign exchange chief. Some of the netting houses

would disagree, but the G-20 is steaming ahead. Some legal ssues remain to be ironed out, but participants in the project believe it could be up and running inside two years. Central bankers around the

world will sleep easier if it is.

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#### sold MCA. FX risk was a serious one, a study the authors performed of lng Foreign Exchange Risk by

# Man in hot seat at Chase

PROFILE Donato Layton

In terms of the architecture causing many senior staff uy, t been nothing over the past year to match the merger of Chase and Chemical, two of the largest foreign exchange banks whose combined capacity clearly gives them some claim to top dog status

in the industry. It is a claim which Citibank, long time market leader, would fiercely dispute, and it is an ambition which Chase itself eschews, but there is no argument about the potential. The key issue is whether the whole can be made more than ths

sum of the parts. The man saddled with the task of pulling it off is



Donald Layton vice-chairman in charge of global markets at the new Chase, the name of the marged bank. He is confident: There is no reason why you can't put them together and get better than the parts added up. We did this once before with Chemical and Mannfacturers Hanover. I don't think it is going to be that bard. It is the same business on both

From a forex perspective. the merger made rense in that there was perhaps not more than a 50 per cent overlap in their businesses. Chemical's business was dominated by market-making, with financial institutions, investment funds and "corporates who acted like professionals" as its main costomers. Chase, by contrast, had a much stronger sales emphasis, was

corporate customers, and had a greater emphasis on value-added" rather than anille solutions. Given this balance between the two component parts of the new bank, and the clear shift in the business away from market-making towards Customer business. It is

slightly fronic that Chemical

bac gained the upper hand.

more oriented towards

"The wrong bank won," is the judgment of one competitor. Mr Tayton will

He is confident that the bank will not lose clients as a result of staff who have left. "Relationships are institutionalised as well as personalised. It is not just a question of the guy on the

The merger is a two-stage business: the first part. actually putting the two tions together, has been to effect since April 8, when Chase began presenting a single face to

"While the physical and technological sides of the merger have been achieved, the psychological aspect will obviously take longer," says Mr Layton The second step of the

process involves getting the cost savings out of the merger, the aim being to keep "virtually 100 per cent" of the revenues at the same time. The effect of the merger has been to cut both costs and staffing by about 20 per cent, but revenues are more difficult to judge because they depend on market conditions. Mr Layton believes, though, that they are easily being

maintained. Now the challenge is to build the business - in particular, to combine Chemical's market-making ability with local branch network and global reach of Chase; to take less mature currencies - Mr Layton cites. the Greek drachma as an example - on to the world

"Cross-over trades" is what the bank needs to achieve success - the merged bank bas more products and customers than either of its constituents. The two must be brought together.

Mr Layton believes Chase should be able to grow, by taking market share, and through more successful proprietary trading. He also thinks Chase

should have a larger share of the client market. "We do not have our natural market share for the bank we have become." Remedying this will

involve doing a better job of pursuing corporate business. but the stress will be on the institutional side, with rising global investment flows the main stimulus to market

Philip Gawith

# WHY CLIENTS TURN TO CHASE FOR EXPERTISE IN FOREIGN EXCHANGE

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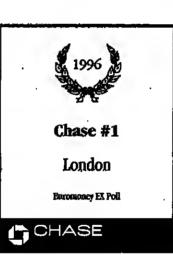
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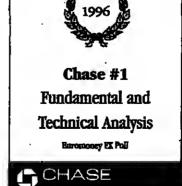
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**US dollar:** by Philip Gawith

# Dollar does an about turn Funny

The biggest question facing the markets is whether the currency's rally will prove enduring

If a week is a long time in politics, then a year is an aeon on the foreign exchange markets. A little over 12 months ago, the dollar had sunk to historic lows against the D-Mark and the yen, prompting concerned dtscussioo about its future as the world's main

A year later, that concern s somewhat overblown. The dollar has rallied by about 27 per cent and 12 per cent respectively from its lows against the yen and the D-Mark to reach its current levels around Y109 and DM1.53. Its atatus as the dominant

trading currency is unimpaired - official figures show tt figures on one side of 83 per cent of spot foreign exchange transactions – and its pre-eminence as the leading reserve currency

Now the higgest question facing the markets is whether the dollar's rally will prove enduring. The fundamentals appear favourable, but the sluggish rally, especialty against the D-Mark, has led

the momeotum to keep going. What, however, caused it to turn in the first place? Stripped to hasics, there were three main elemeots: improved Inter-

national economic co-operatioo; the relaxation of monetary policy in Germany and Japan: and the improved performance of the US economy, coupled with a more credible policy hackdrop including towards the dollar. The issue was also redefined.

It became increasingly clear that the focus of the problem lay more in the overvalued currencles and stagnant economies of Japan and Germany than in the weak dollar.

to the US, there were two crucial developments. The first was the emergence of a hipartisan consensus hehind the desirability of a balanced budget. This helped convince mar-kets that the US was serious aboot putting its ecocomic house in order.

The second was the appointment of Robert Rubin as US treasury secretary. As the former senior partner of Goldman Sachs, the prestige Wall Street tovestment hank, he started with the advantage of baving the market's respect and his considerably to the credibility of the Administration's ecoHalped by the US'a good economic performance, especially compared with Germany and Japan, he was able to achieve the considerable feat of overturning traders' deep-seated scepticism about the dollar.

An important element in achieving this was a series of succassful bouts of central hank intervention between April and August 1995 to sup-port the dollar. These were instrumental in ahifting market sentiment in favour of a stronger dollar, just as earlier failed houts of support had convinced markets that the dollar had to go lower.

Mr Rubin, however, did not work his magic alone. The perllous state of the Japanese banking system convinced Japanese authorities that fiscal and monetary stimuli were oecessary to haul the ecocomy out of a deflationary spiral. On the monetary side, thia required a weaker currency

and lower interest rates. Germany also shifted tack -the Bundesbank stopped making snide compots about US economic policy, continued to loosen monetary policy through the exchange rate and interest rates, and started calling for a stronger dollar. As with Japan, this change

omy. In Germany's case, the need to boost economic growth through keeping exports competitive was given added urgency by the imperative of meeting the convergence criteria of the Maastricht treaty.

The dollar's turn, therefore, was in part a function of economics - Japan and Germany needing weaker currencies, and the US economy clearly outperforming. But policy also played a role - the fact that the largest three economies were all believed to want a stronger dollar gave traders and investors confidence to buy dollars again.

What of the future? A forecast, published by Consensus Economics, shows the market believes the dollar will be trading at DM1.539 and Y106.2 in a year's time, barely changed from current levels, although some influential forecasters are predicting levels of Y116-20 and DM1.60/70 before then.

As ever there are risks: renewed turbulence in the ERM, causing a flight to the D-Mark, or an economic upset in one of the three main economies, would probably suffice. But even if most of the dol-lar's rally is behind it, especially against the yen, it is still easier to see it rising, rather than retreating.

**Exotic currencies:** by Philip Gawith

comes of age

Demand for obscure currencies is growing as investment in developing countries

When Derek Saville started to develop Standard Chartered's emerging market currency husiness back in the early

1980s, it was known as the

funny money" desk. Today it would be more appropriate to talk of hig money. With mature currencies less volatile than in the past, hanks are looking for new opportunities in foreign exchange. And rising trade and investment flows to developing countries have boosted demand for previously obscure

Over the next few years 50 per cent of all the growth is going to take place in these markets," says Mr Saville, head of treasury giohal prodncts at Standard Chartered in

Asln and Latin America have long been the emerging markets most active for currency trading, but there has been increased activity in east European currencies such as the Polish zloty and the Czech koruma, as well as the South African rand.

these axotic currencles remains small - figures are notoriously vague, but global daily turnover could well be below 5 per cent of that in the mature currencies. It is the rend, however, that is impor-

Banks confirm that there is rising customer demand to trade these currencies and the signs are there for all to see the increasing number of banks hustling for a piece of the business, the burgeoning volume of research produced and the hot labour market for emerging markets talent.

Although exotics may still be on the margin, they are moving increasingly to tha centre. There are days now when n currency such as the rand or Mexican peso can dominate dealing room activity. sometimes to the point that the explanation for movements in the "majors" can be traced hack to developments

in one of the exotics. These currencies are also performing well when maasured by the key benchmark of profits. Although volumes may be low, these are often handsomely compensated for by generous margins.

Steve Jennions, emerging markets atategist at Banque Indosnez in London, says: "If you are the only bank that can provide a currency payment into Algeria, your reward is obviously going to be quite

While Cltihank, with branches in 97 countries, is to some extent in a category of its own in foreign exchange, it will still come us news to many to learn that roughly half of its forcign exchange profits are now carned in emerging markets - approximately double the level five

At Standard Chortered. more than half of the foreign exchange profits in the London dealing room come from emerging markets.

Guy Whittaker, head of global foreign exchange at Cittbank, says that in the 1992-95 period, the halmace tween old and oew markets "shifted quite significantly" with a commensurate shift in resource allocation for the bank, both in regional centres and local currencies.

As in all markets, there is a trade-off to be had between liquidity and margins. While banks enjoy the fat margins associated with Illiquidity. they also banker after the comfort of knowing that they can sell when they need to. Mr Jennions says: "We need more banks in on a fully-fledged hasis to provide Itquidity to the market as opposed to just their clients.

Whether the husiness will be as fizzy as some optimists expect is a most point. Mr

exchange and interest rates SBC Warburg, comme "Emerging markets will be good, but nowhere uses any body's expectations. More yes.

caue will come, but it is no going to be an easy stream The 20 per cent fall in the South African rand sariler this ear, after a long period of the hillity, was simply the most recent example that some of these markets remain volatile. gabn bid wi

blevision right

I www World C

Whether new entrants have the stomach or the nous for the long haul also remains to be seen. Mr Saville is sceptical about their pain barrier. They may have deep pockets but once they realise the risks. the problems ... The issue goes further: The culture is not there yet. It is very important for the culture among the

whole bank to be there." For now, distinct difference remain between exotic and mature currencies. Aside from factors such as liquidity and margins, exotics tend still to be influenced by domestic political and economic events while maturo currencies respond more to shifts in mon etary policy in the main econo mics, not simply their own There is also less speculation often because it is prohibited.

Mr Saville's advice is simple "Try and get as close to the central banks and policy-mak ers as you can, and listen very carefully to the advice you are given, becomes they mean what they say. They don't deal in soundhytes."

Currency strategists: by Graham Bowley

# Crystal balls are often wrong

Clear thinking, acute writing and strong conclusions are qualities valued by investment managers

With big salaries, fast cars and, for those at the top of the profession, a guru-like status whose scribblings ottract fame across the City of London, Wall Street and beyood, the star of the foreign exchange strategist has risen far in recent years.

But strategists are for from infallible. Indeed, most are often wrong, especially on the post beavily traded currencies which are the ones that matter

"We have never met anybody wbo has consistently predicted the major trends in currenctes," says Tony Baverstock, treasurer at Clerical Medical, the life assurance group.

investment managers, whose desks daily groan under the weight, of the industry's outpourings, may therefore ask why they should take note?

The answer is that their work is valued not for the accuracy of their forecasts hut for the wide variety of ideas they are able to generate and which investors can use as a sounding board for their own

"We do find them useful just because they are looking at things from a greater research base. We can't replicate that research hase," saya Tim Swadling, portfolio manager of currencies and international fixed income at AMP Asset

Paul Abberley, head of fixed income at Lomhard Odiar Investment Management Services, says: "The key thing we want to know is what is driving currencies at any one time. There are things which we can do ourselves – for example forecast - hut large houses can see the current flows which we

Banks and securities houses have set up strategy depart-ments in the hope of winning business with investors, calculating that a good corrency research service will belp cement a longer term relation-ship with potential clients. With little profit left in purely transactional currency trading, foreign exchange departments have become increasingly client focused and research is viewed as a critical marketing

"People are finally realising that in order to have good cllent relations with hig institutions, serious research is highly valued," commented one analyst.

The result has been strategy and research departments which at times have seemed an awkward fit within banks and securities houses - not least since unlike other areas of the organisations their actual value-added is hard to quantify. Departments have come into existence whose sole raison d'etre has at times seemed simply to be a public relations office - wining and dining potential clients and acting as pundit on television and in the

But this strategy does

are apprectative of strategists work and will ofton award business according to the standard of research. At the same time they recognise that the output varies greatly in qual-

"We have a system where we rank houses by a number of attributes, where research is the highest. This system deter mines how we distribute our husiness," says Mr Swidling: What are the qualities that

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are valued in strategists' work? Clear thinking, acute writing and strong conclusions. It seems, come top of many

investment managers' lists "A good analyst is someo who is able to take the theory and apply it to the market in a convincing way. There are very few economists who are able to do that and far too few are willing to put their reputa

tions on the line," says an Mcader. But as well as good analytic cal abilities, how seriously a strategist's views are taken wilt often depend crucially on who he or she works for. If customers think the strategist are seeing hig currency flow they will want to know the

"The higger the house the better the global vision," says

I'M NOT TALLING SHORT TERM, LONG TERM OR MEDIUM TERM - I JUST WANT TO KNOW IF THE LIFT IS GOING 'UP'OR 'DOWN'



Mr Abberley.

Mike Rosenberg, head of fixed income and currency research at Merrill Lyncb in New York and author of an authoritative book on currency forecasting, is critical of what he calls "I-can't-be-wrong forecasts" - forecasts that

make no strong predictions. He thinks currency strategy is inseparable from economic analysis. "A good framework must be based on economics so you can't separate currency strategy from economics," he

But finally, however clear or comprehensive the analysis presented by strategists. investors realise that in the end it is their money which is

at stake. They therefore treat most strategists' work, he splta of the big salaries, fast cars and. In some special cases, the guru-like reputations, with e certain healthy scepticism.

"There is nobody we pull out from the pile and say that is a person who gets it right in the tong term," Baverstock. "You finally have to take a pant yourself and decide where to invest your



